

FOSTOT 60884660

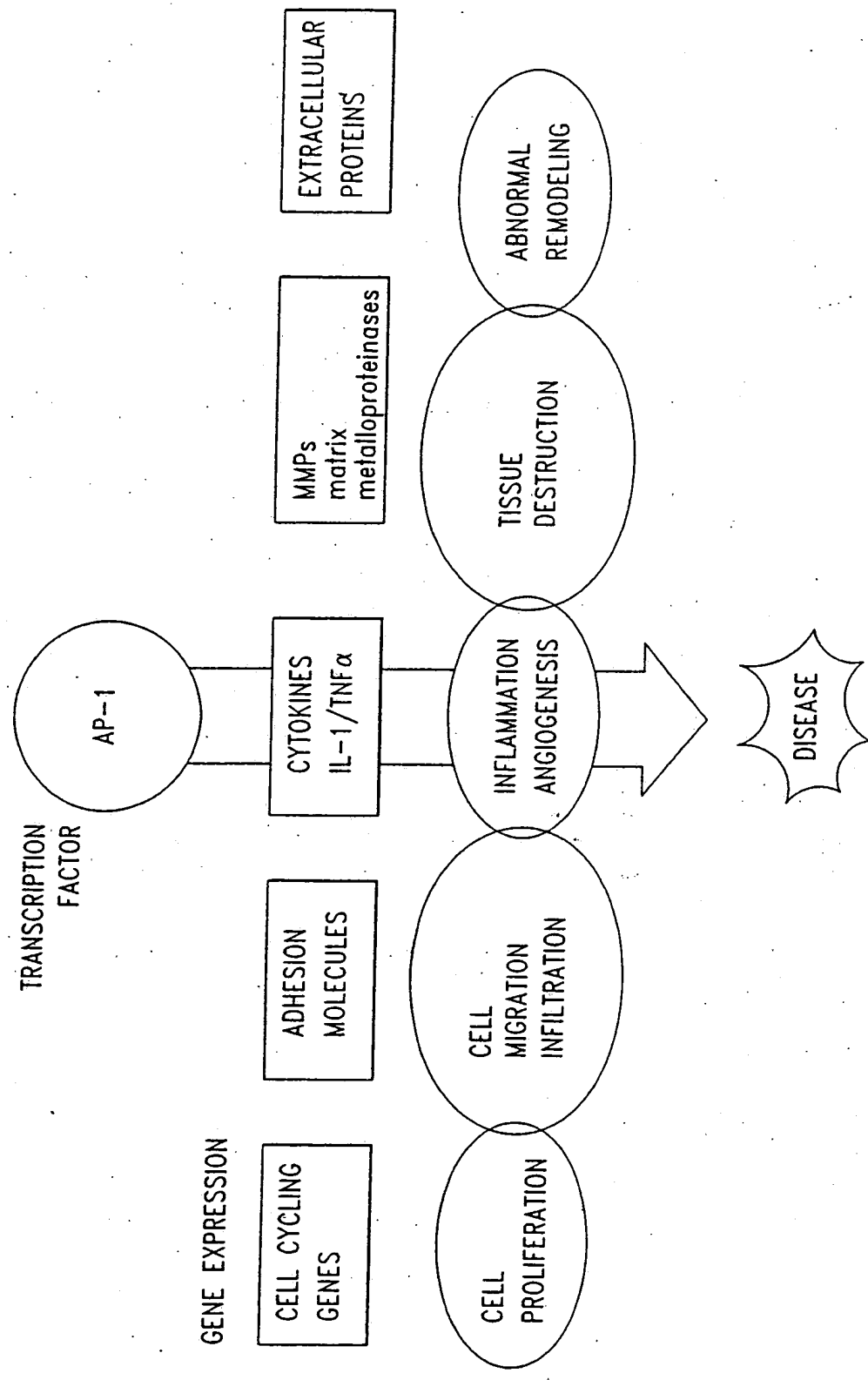


Fig. 1

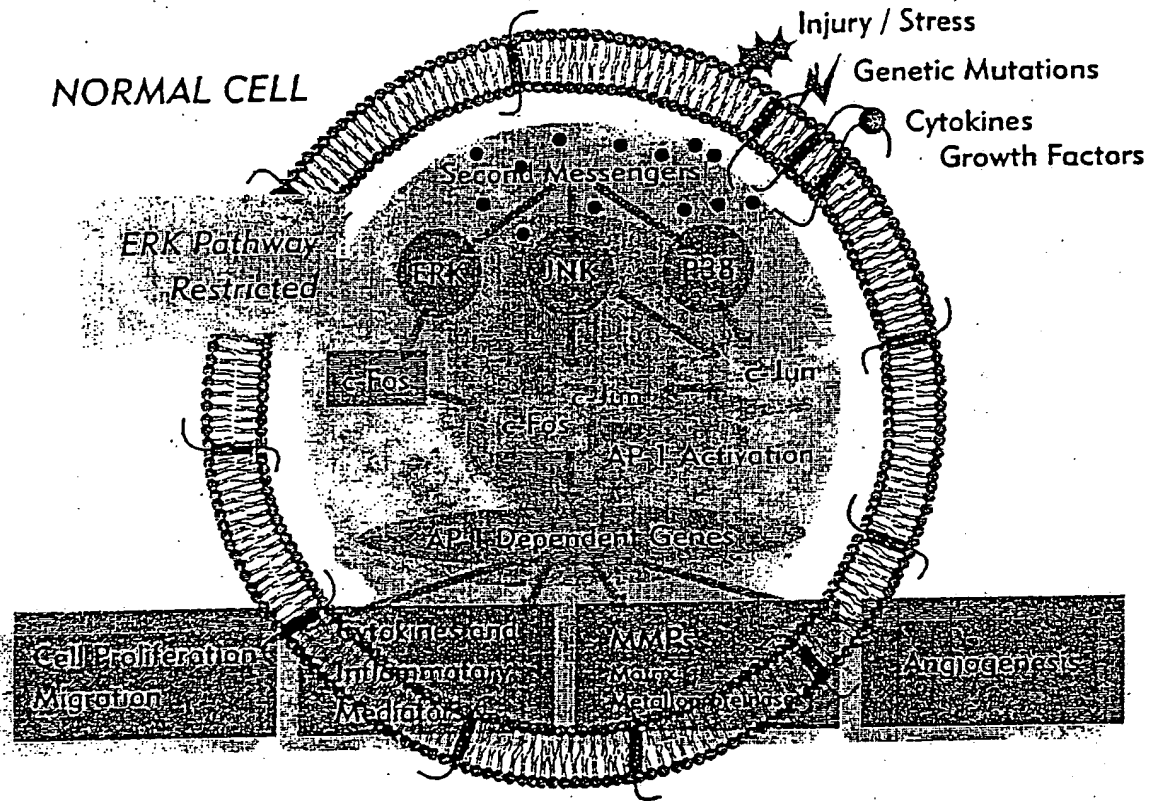


Fig. 2

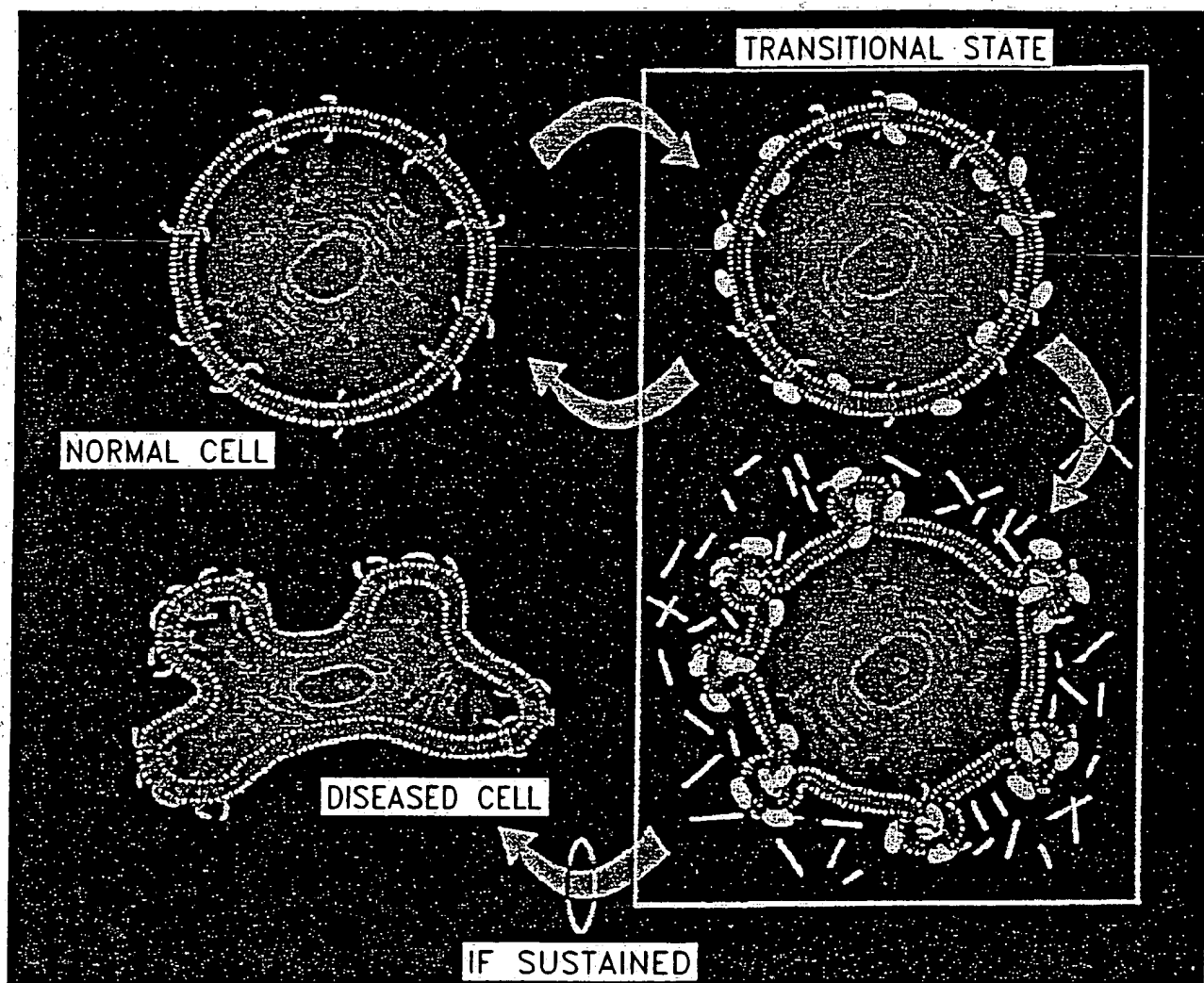


Fig. 3

-Focal Adhesions (-FA)

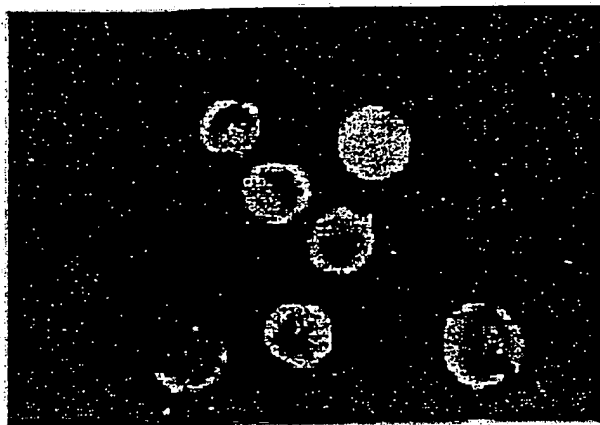


Fig. 4A

+Focal Adhesions (+FA)



Fig. 4B

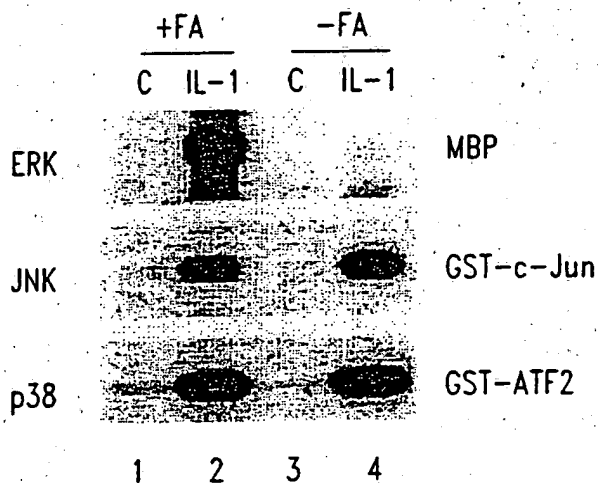


Fig. 4C

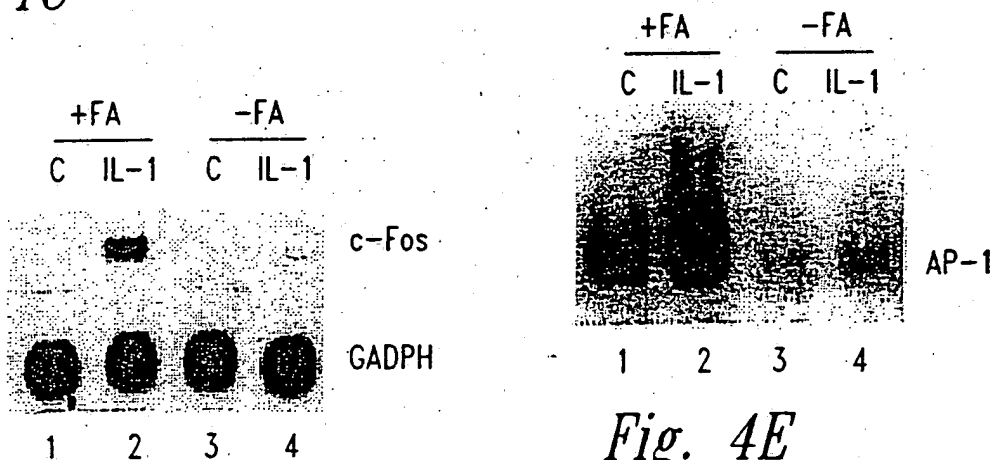


Fig. 4E

Fig. 4D

FOSTOT 60587650

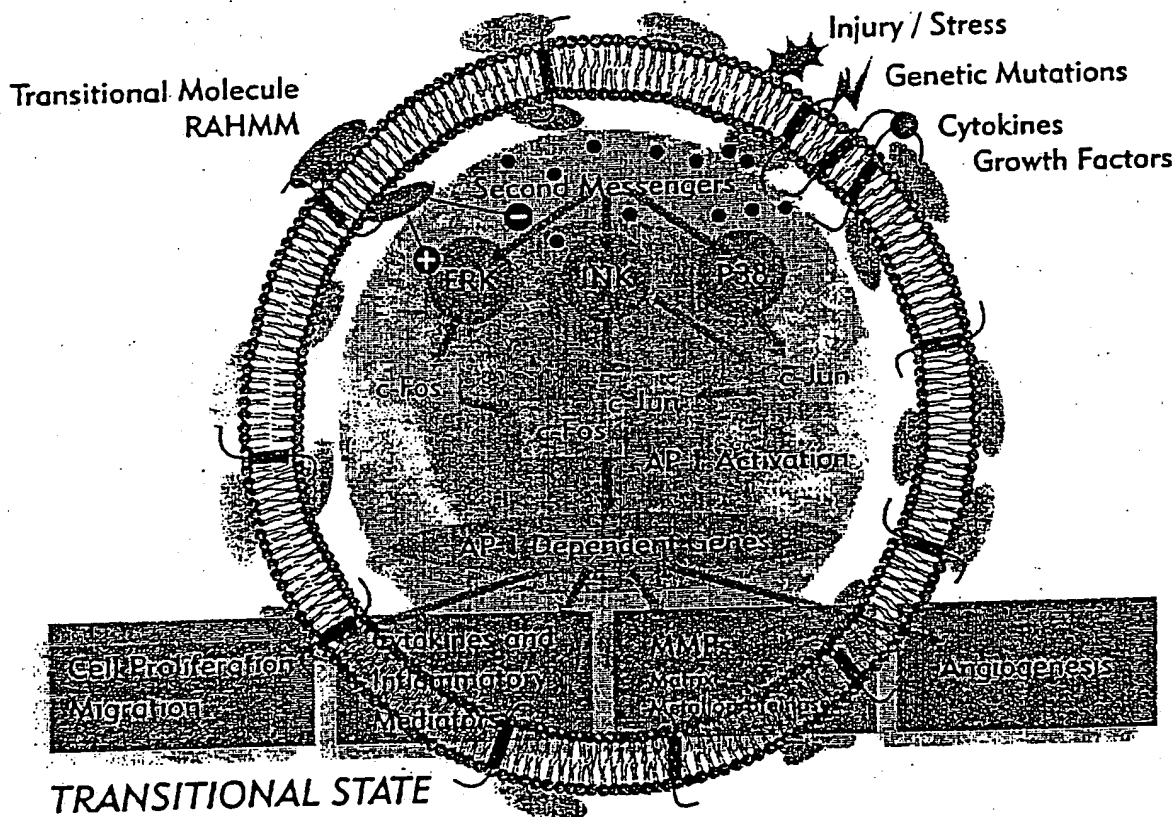


Fig. 5

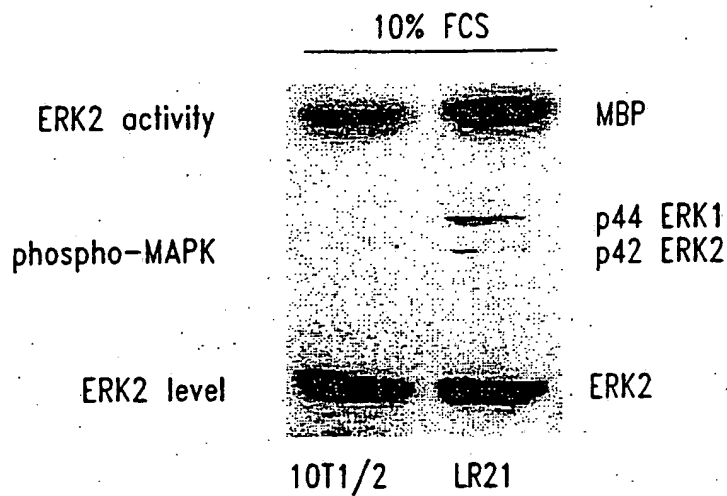


Fig. 6A



Fig. 6B

0097809.101501

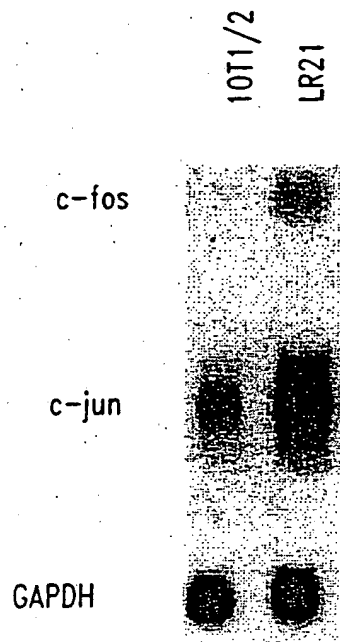


Fig. 7A

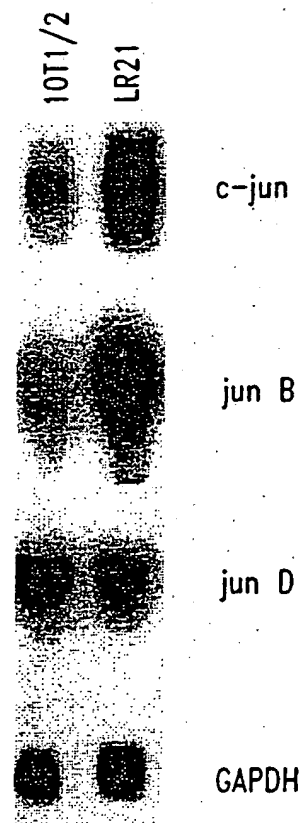


Fig. 7B

FOSTOT 60EB2660

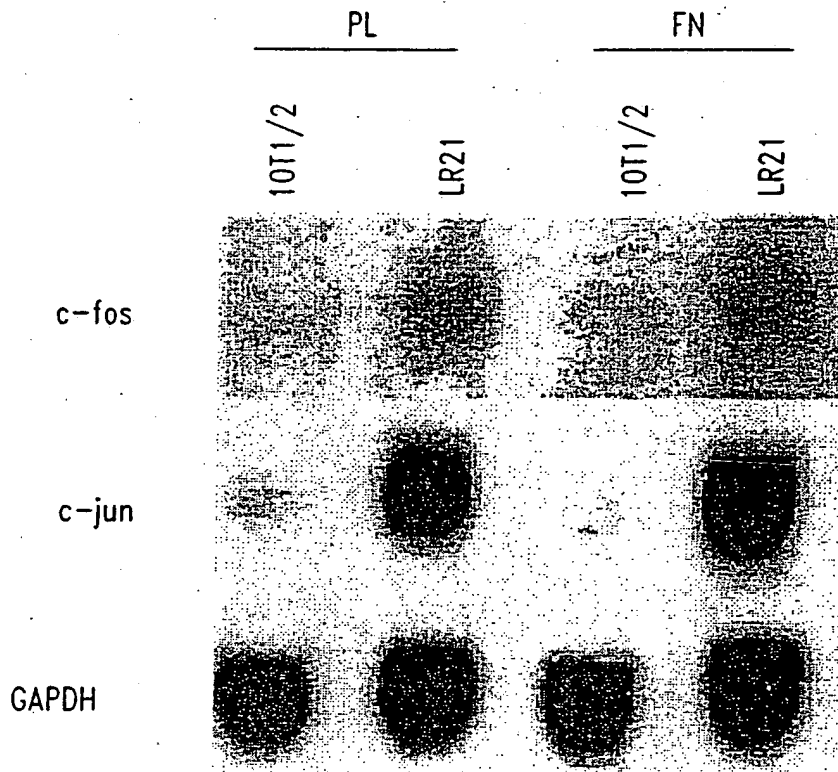


Fig. 8

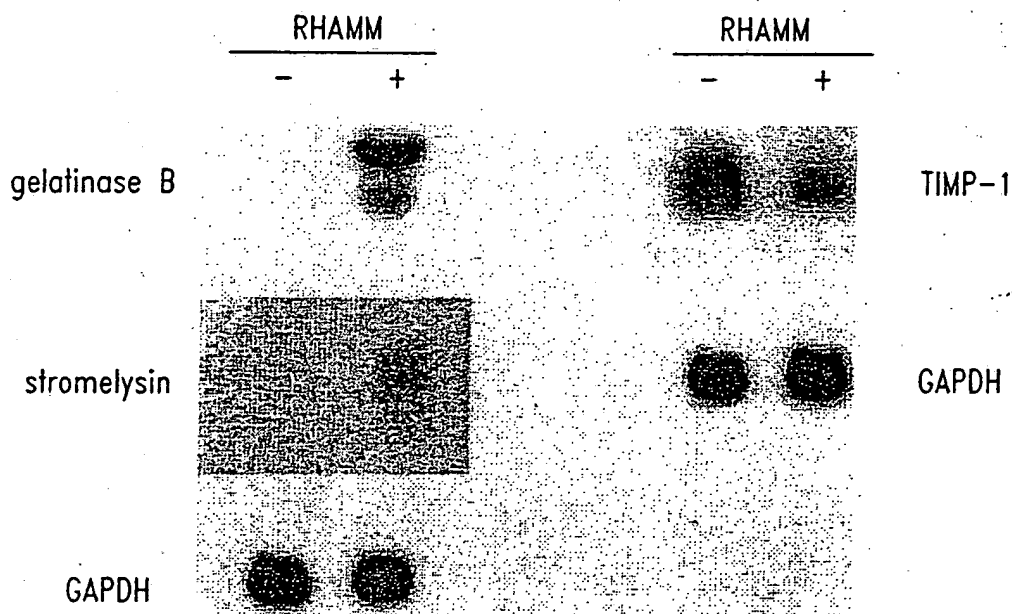


Fig. 9

TOSTOT 60E2660

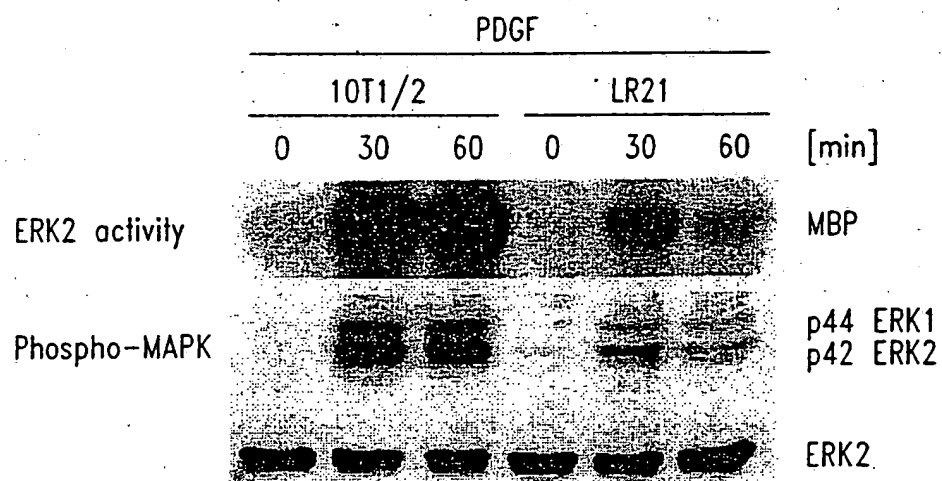
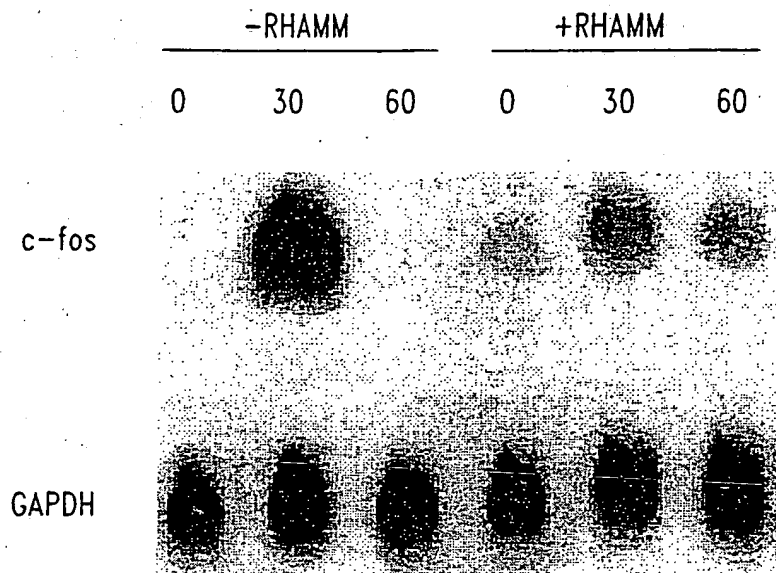
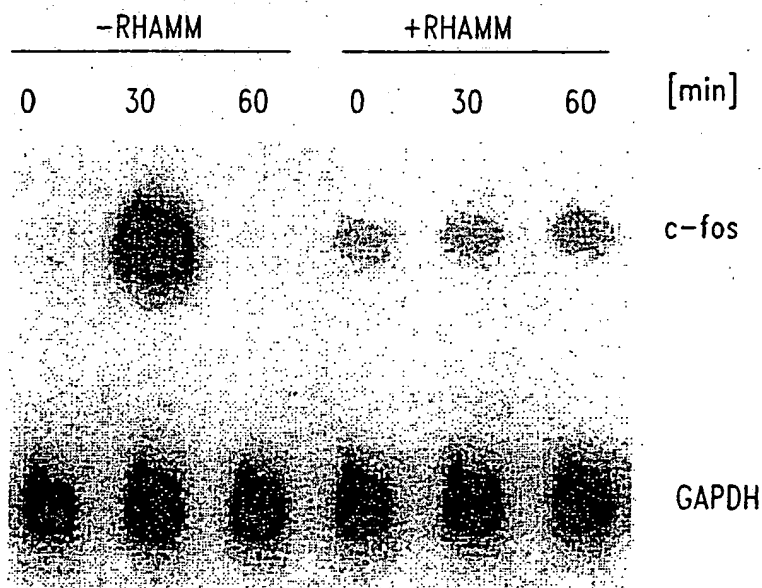


Fig. 10



IL-1

Fig. 11A

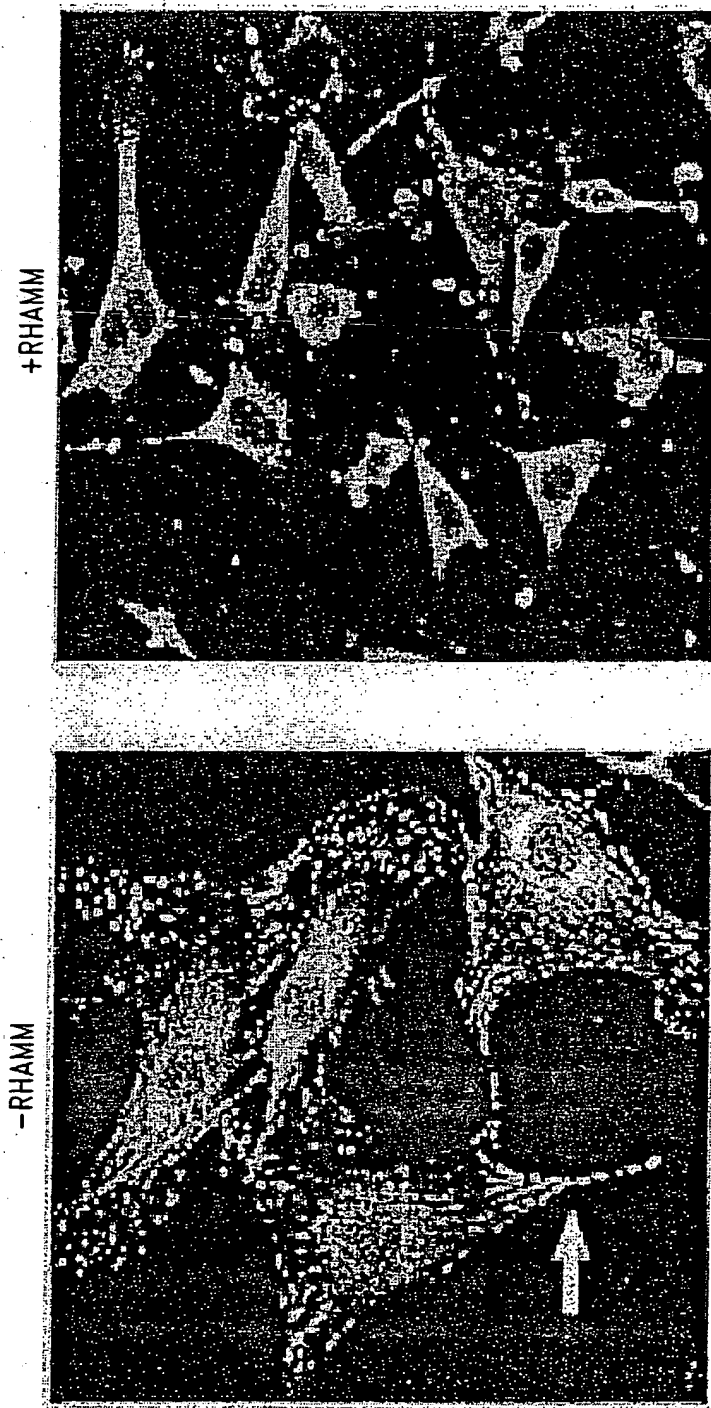


TNF α

Fig. 11B

09978309-10501

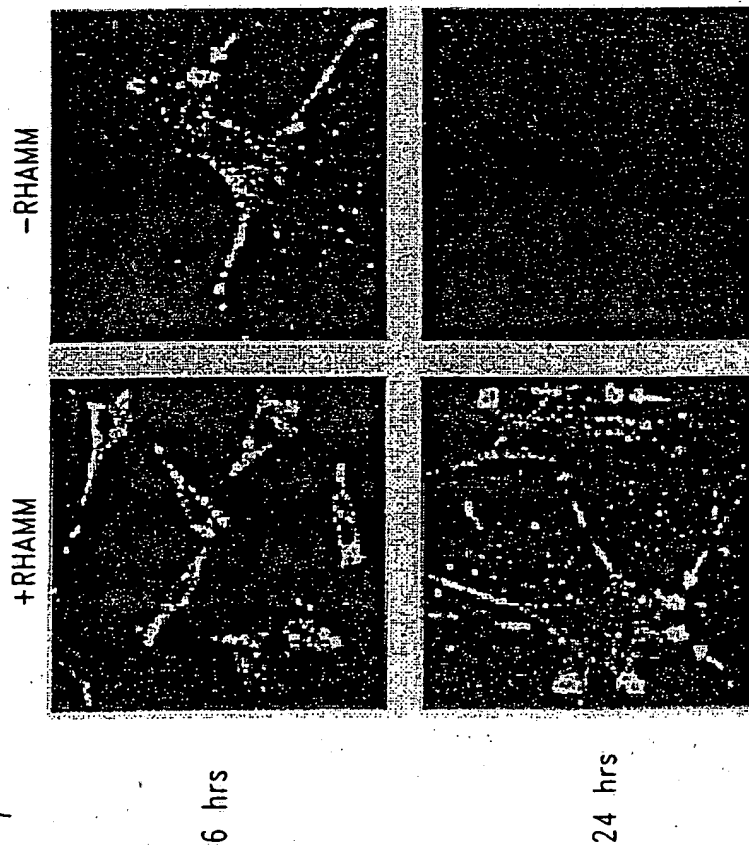
FOSTOT 60E82660



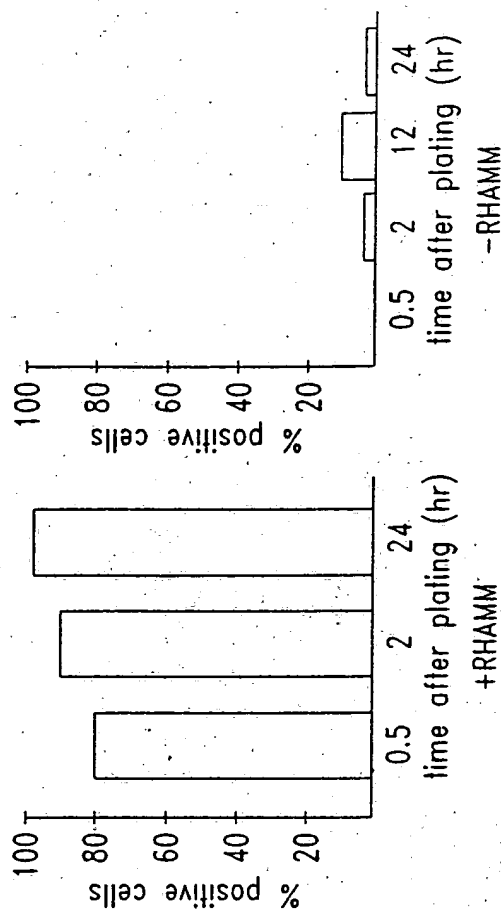
+RHAMM cells make less focal contacts than their parental cells (-RHAMM)

Fig. 12A

Fig. 12B



• Overexpression of RHAMM results in increased and sustained production of podosomes



• In most cells responding to injury, podosomes are formed and disassembled rapidly (-RHAMM, 6 vs. 24 hrs)

Fig. 13

APPLN. FILING DATE: FILED HEREWITH

TITLE: COMPOSITIONS AND METHODS FOR

TREATING CELLULAR RESPONSE TO INJURY AND ...

INVENTOR(S): TONY CRUZ, ET AL.

ATTORNEY DOCKET NO.: 033352-010

SHEET 12 of 63

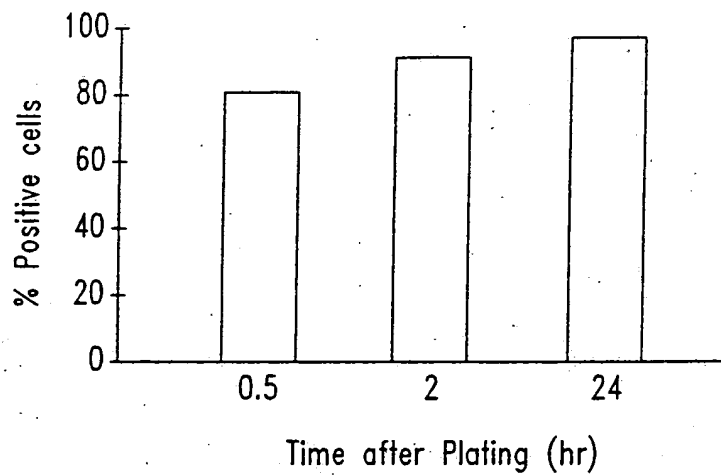


Fig. 14A

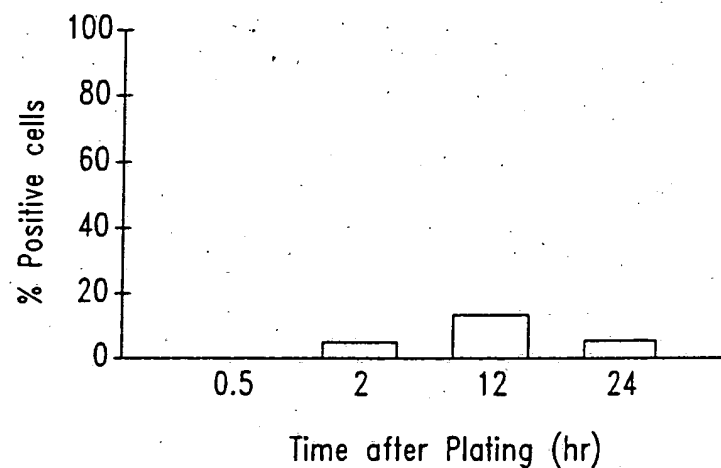


Fig. 14B

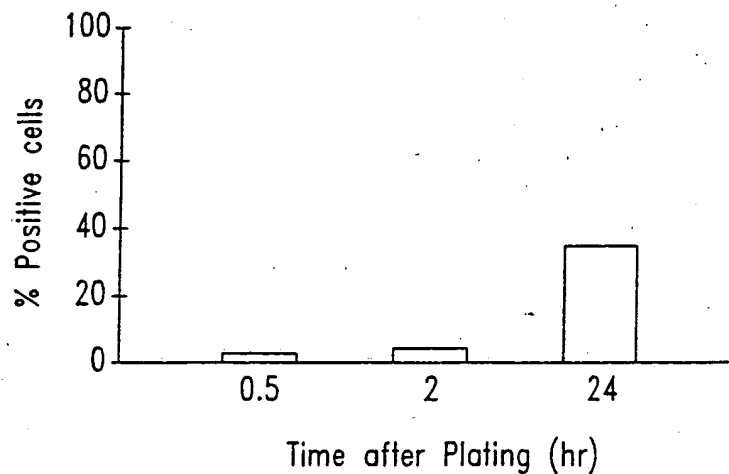


Fig. 14C

FOOT 60282660

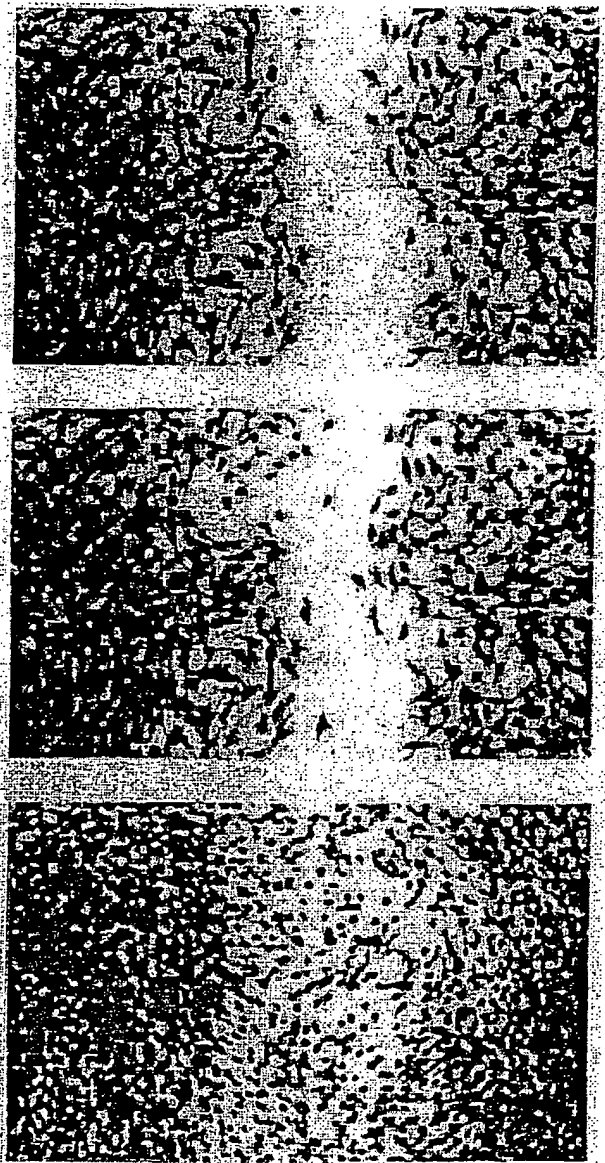


Fig. 14D Fig. 14E Fig. 14F

FOSTOT 60EB2660

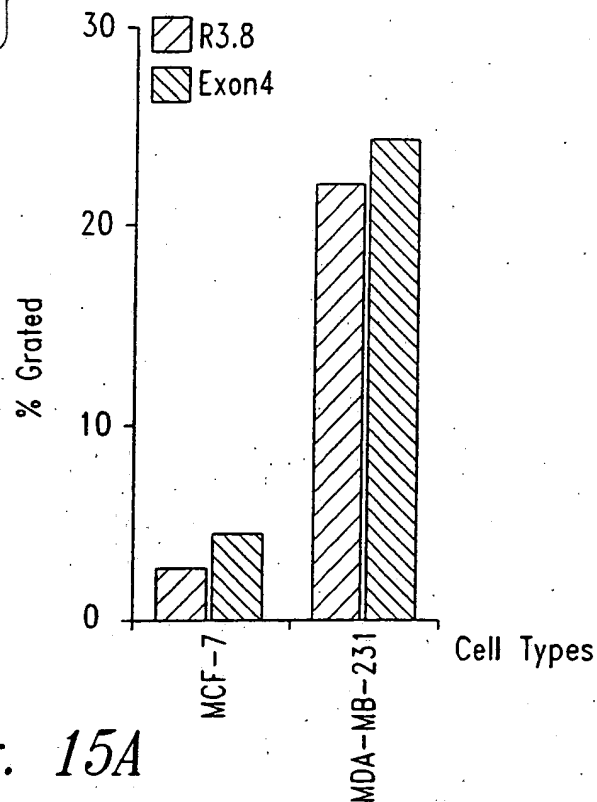


Fig. 15A

RHAMM Peptides

Murine Exon3 sequence:

N-terminal ---KLQATQKDLTESKGKIVQLEGKL--- 23aa

SEQ ID. NO. 14

For Exon3 antibody, used the peptide sequence:

(C) KLQATQKDLTESKG

SEQ ID. NO. 15

Murine Exon4 sequence:

N-terminal ---VSIEKEKIDEKCETEKLLEYIQEIS--- 25aa

SEQ ID. NO. 16

For Exon4 antibody, used the peptide sequence:

(C) VSIEKEKIDEKC/S

SEQ ID. NO. 17

For antibody to Human RHAMM v5, used the peptide sequence:

(C) LKSKFSENGNQKNL

SEQ ID. NO. 18

Homology between three peptides from murine (M) and human (H) RHAMM (as used to raise antibody)

1) Exon3	M:	KLQATQKDLTESKG	as in	SEQ ID. NO. 15
	H:	---V--RS-E-Q--		SEQ ID. NO. 19
2) Exon4	M:	VSIEKEKIDEKC	as in	SEQ ID. NO. 17
	H:	-----S	as in	SEQ ID. NO. 17
3) v5	M:	--A----D-H---M		SEQ ID. NO. 20
	H:	LKSKFSENGNQKNL	as in	SEQ ID. NO. 18

Fig. 15B

peptide 1

peptide 2

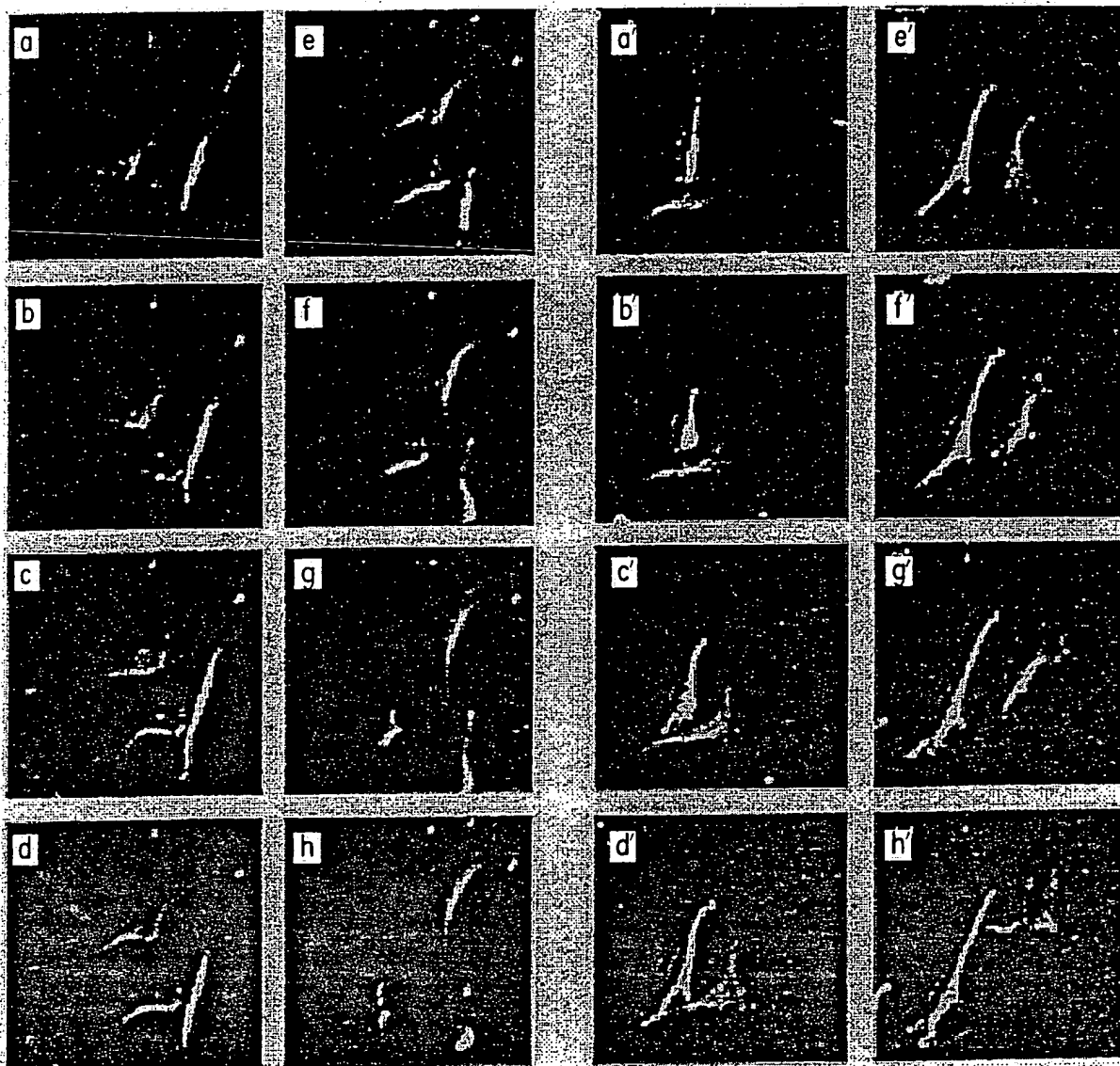


Fig. 16A

Fig. 16B

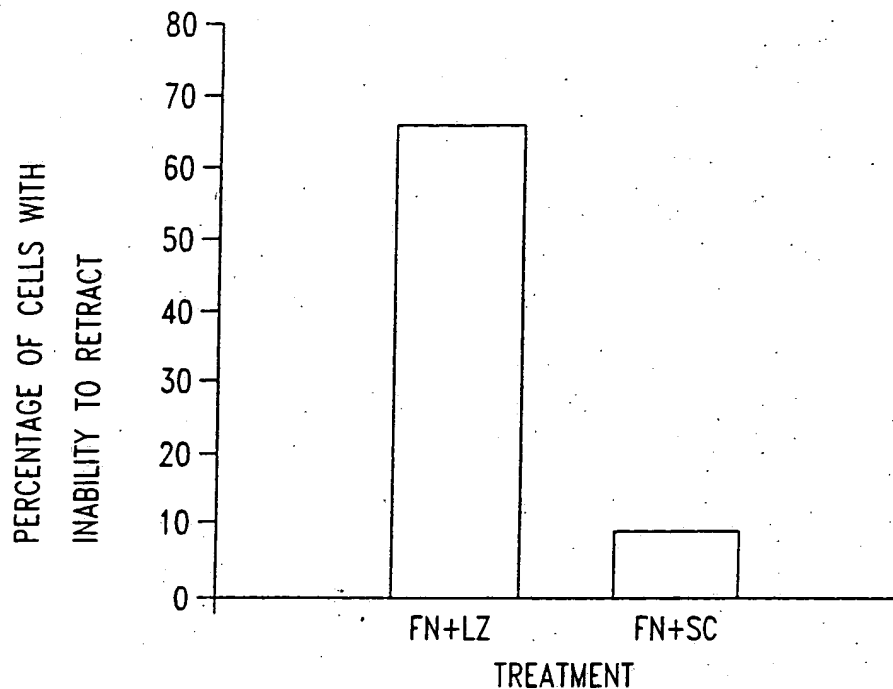


Fig. 16C

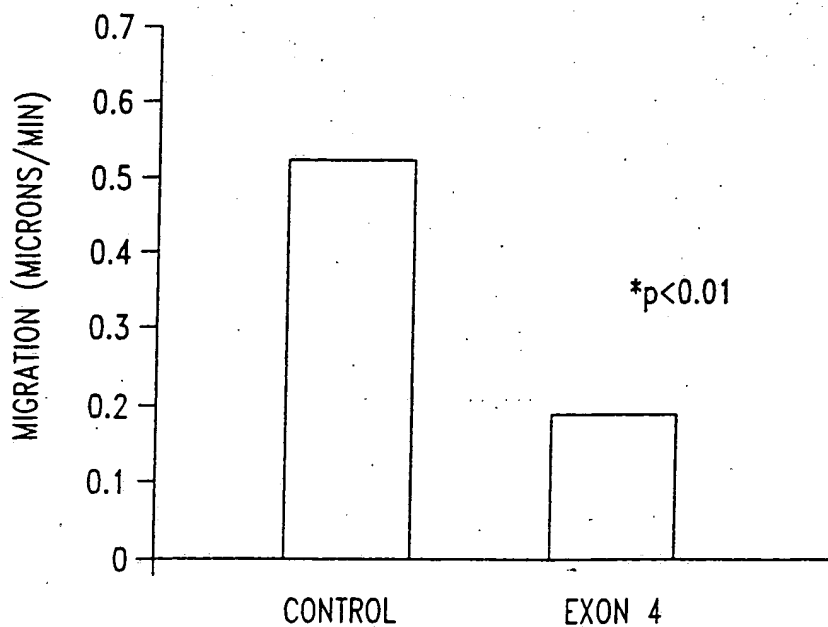


Fig. 16D

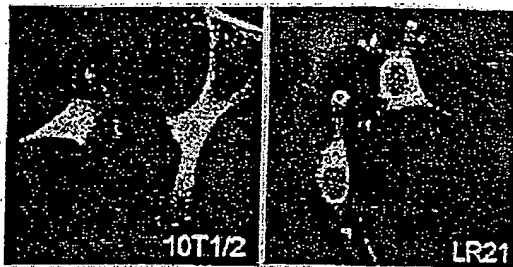


Fig. 17A

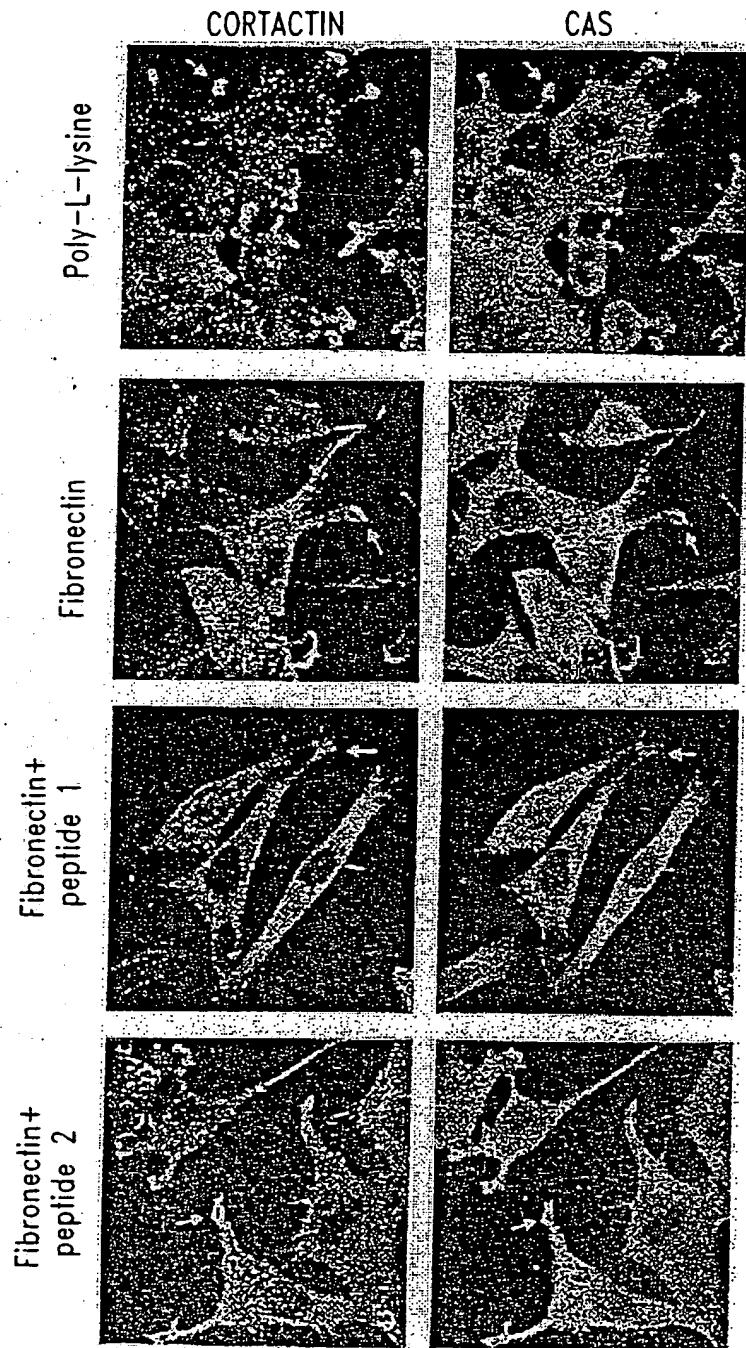


Fig. 17B

FOSTOT 60E8/660

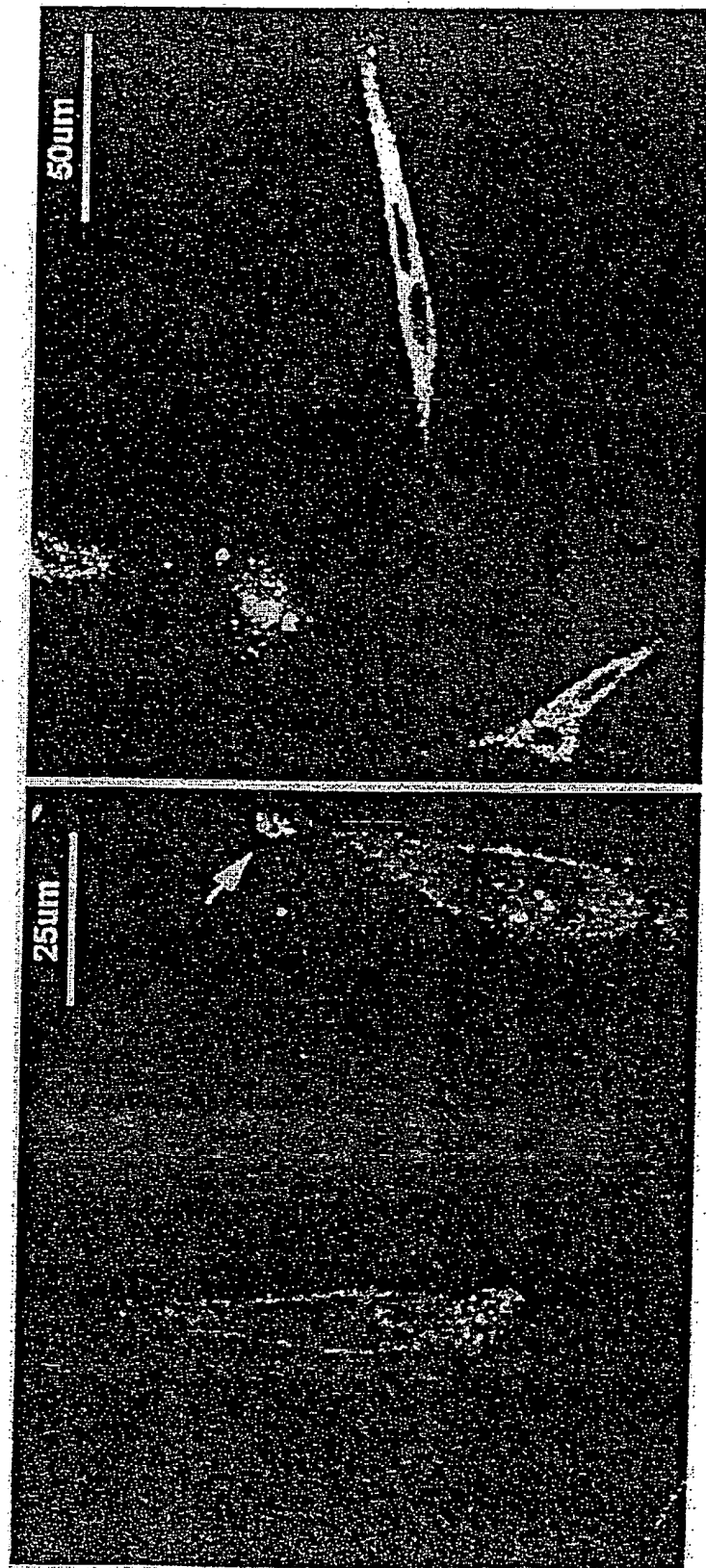


Fig. 18

0978309.10501

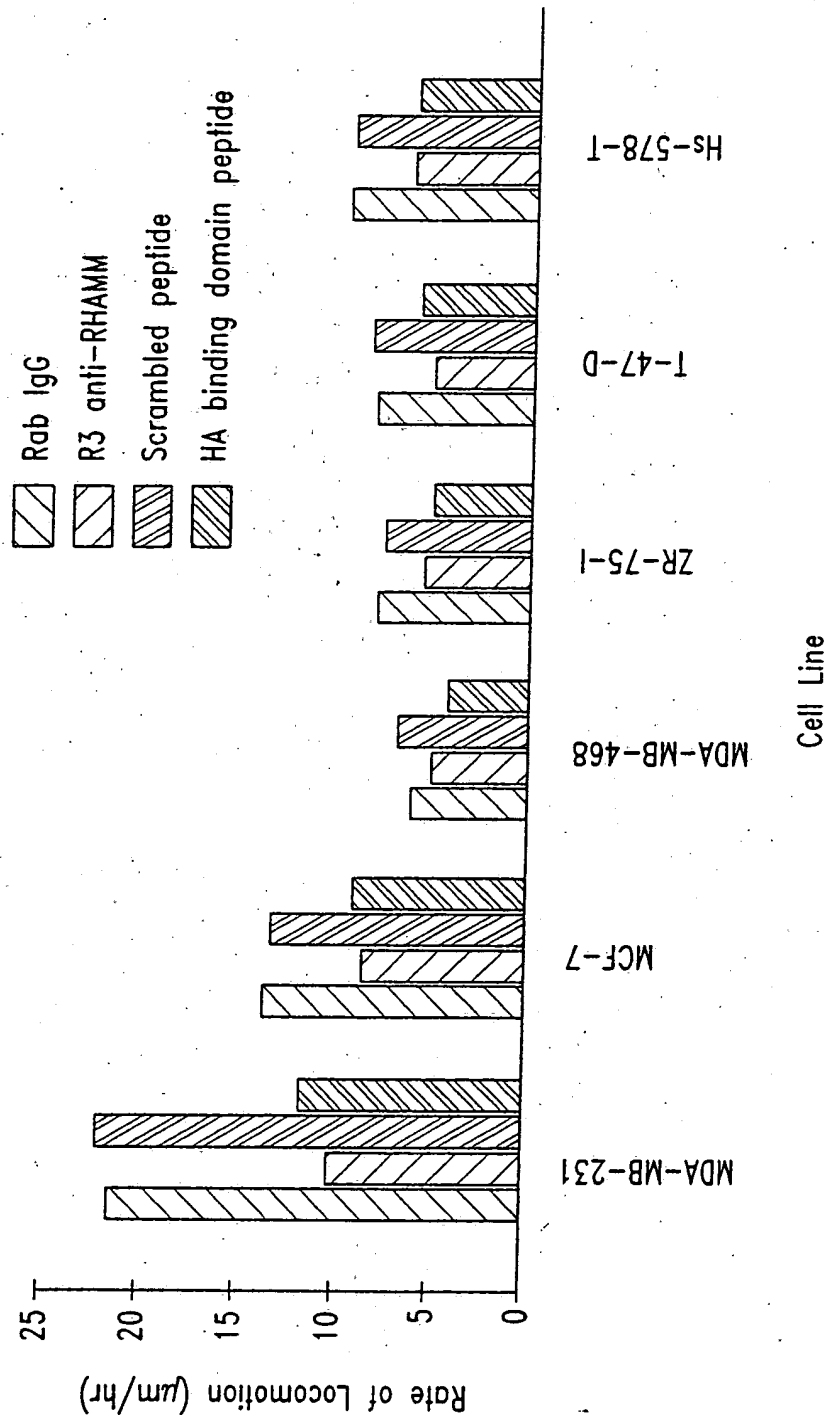


Fig. 19

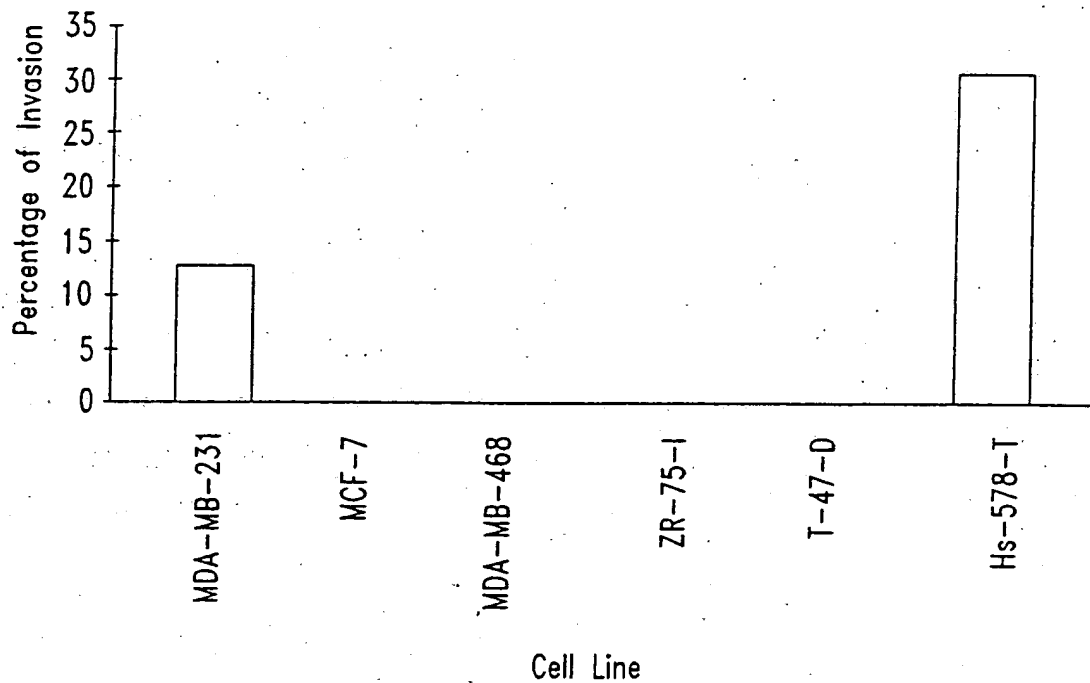


Fig. 20A

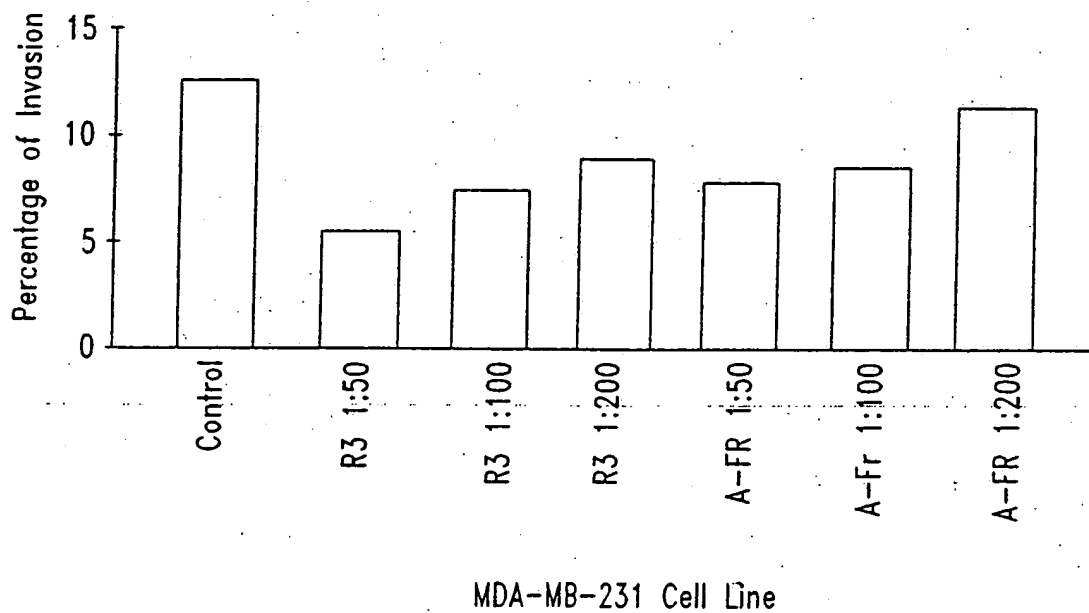


Fig. 20B

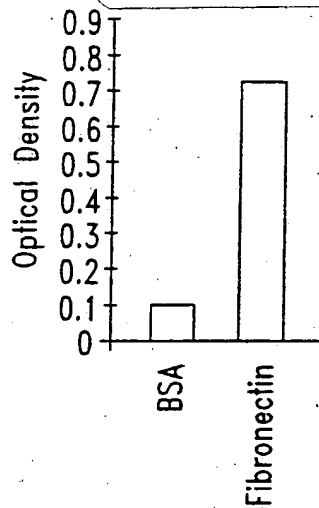


Fig. 21A

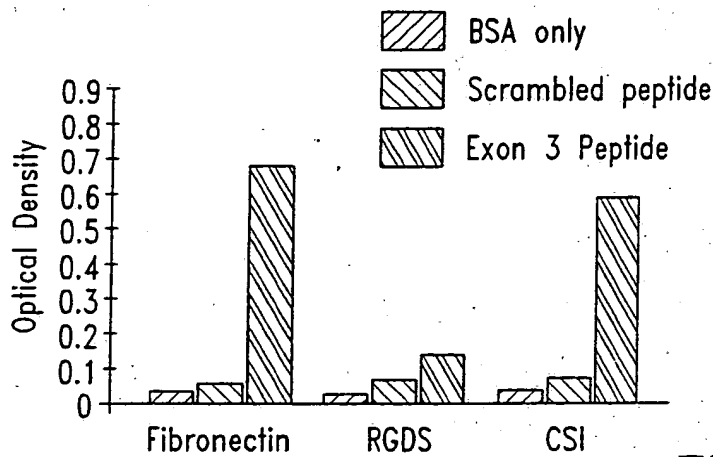


Fig. 21B

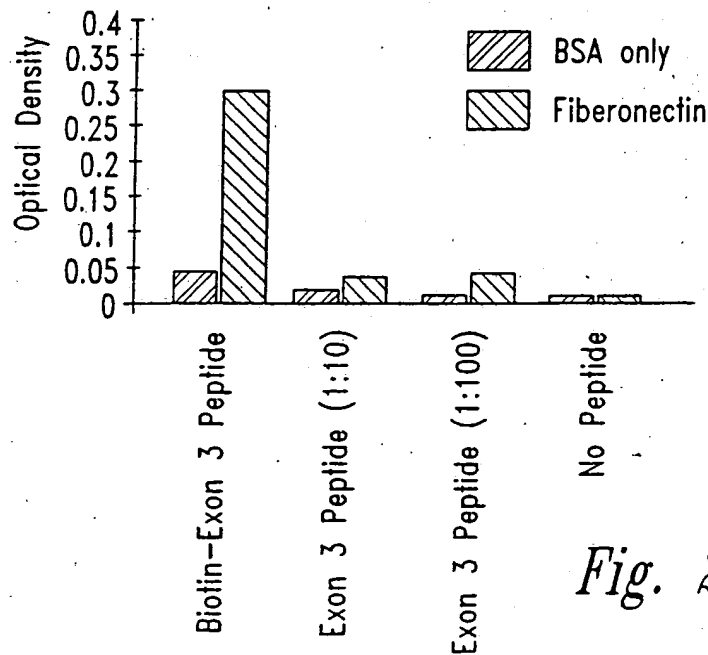


Fig. 21C

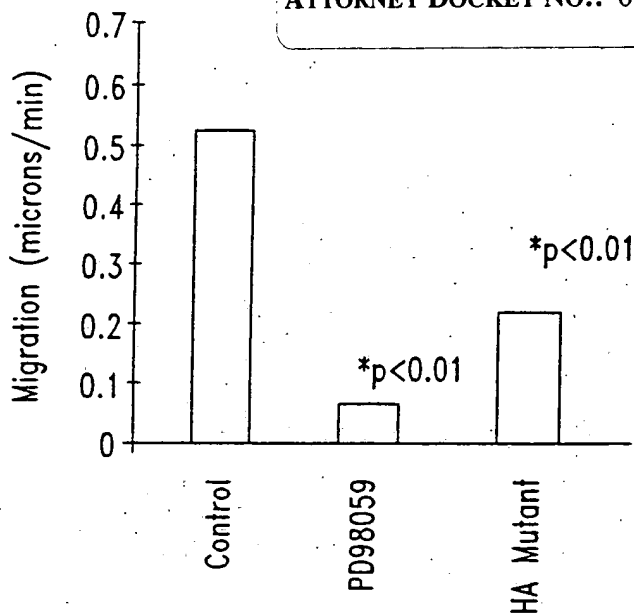
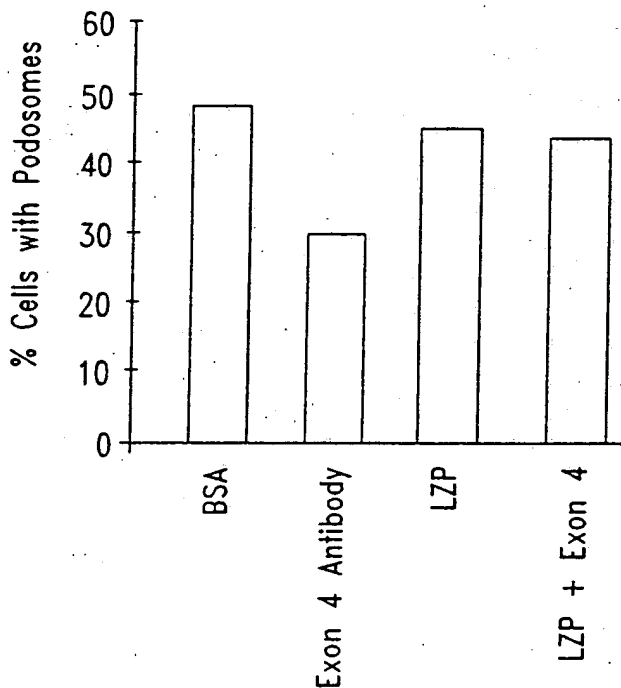


Fig. 22



Effects of Exon4 Antibody and LZIP
 on the Podosome Formation of LR21

Fig. 24A

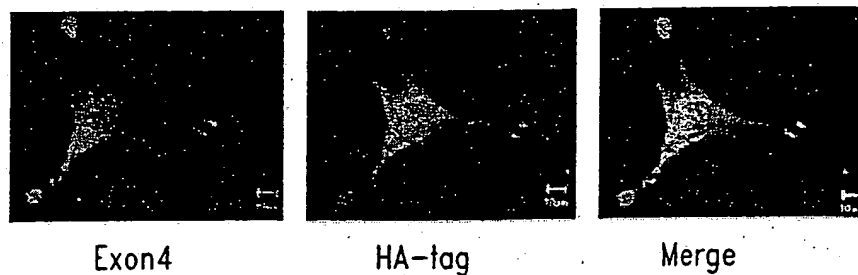


Fig. 23A

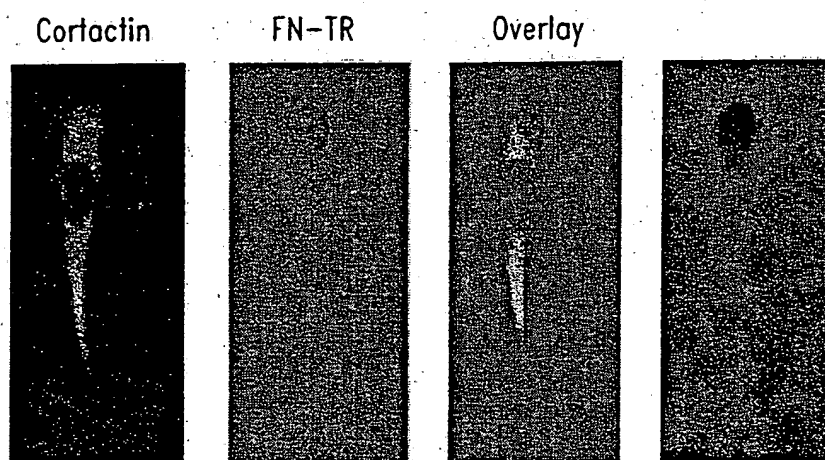


Fig. 23B

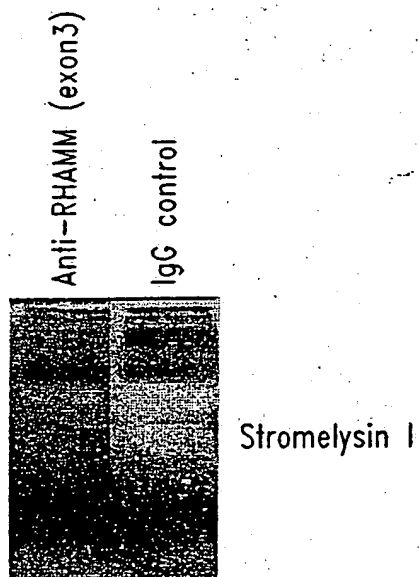


Fig. 24B

09978309-101501

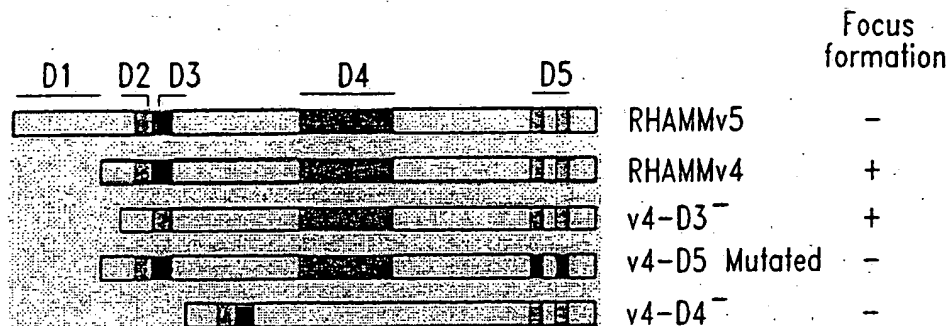


Fig. 25A

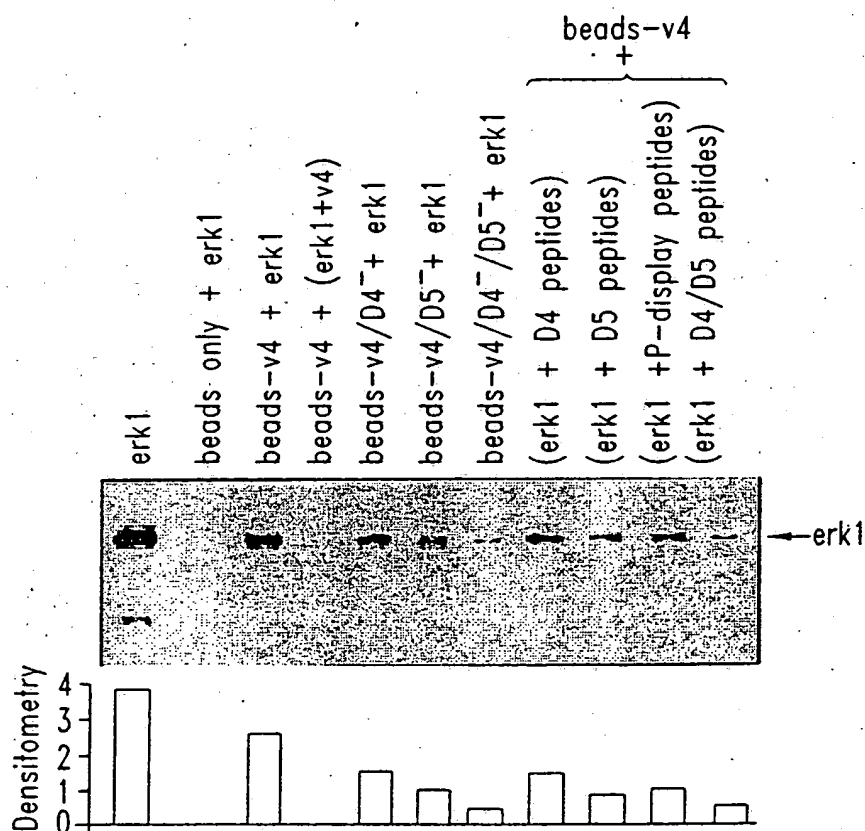


Fig. 25B

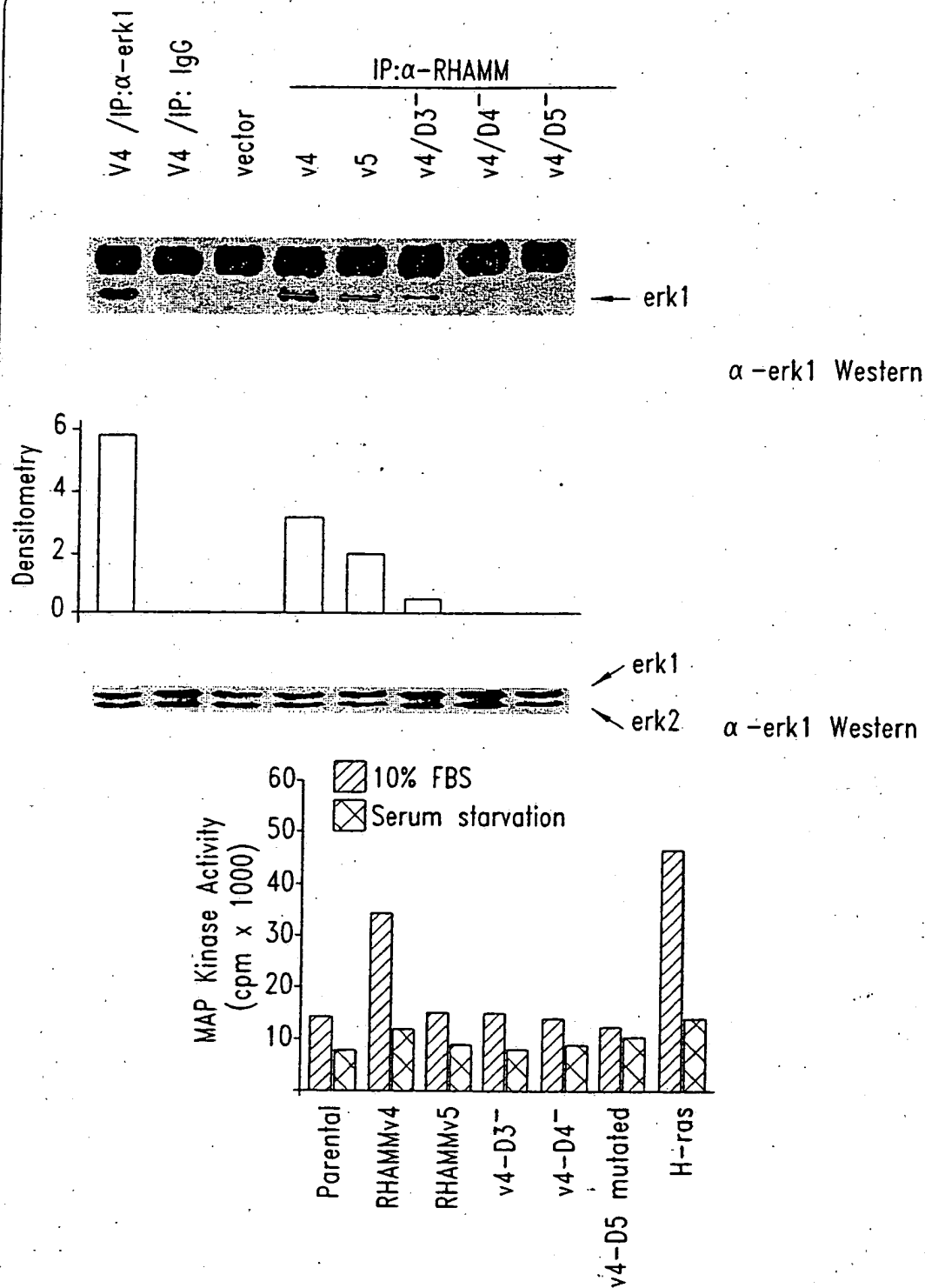


Fig. 25C

A: RGGGRGRRR
 B: RGGGRGGRR
 C: RGGGRGGGR
 D: RGGGGGGGR

Fig. 26A

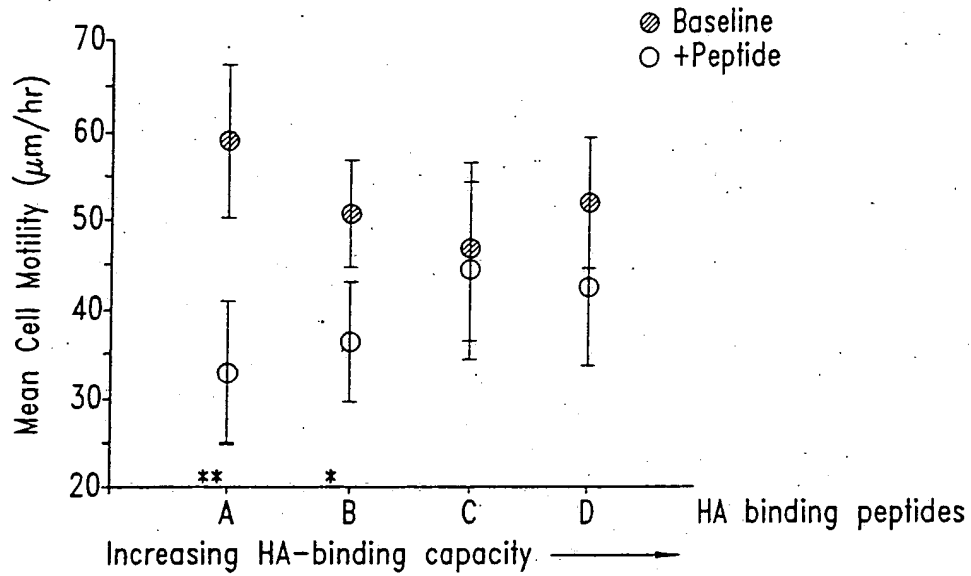


Fig. 26B

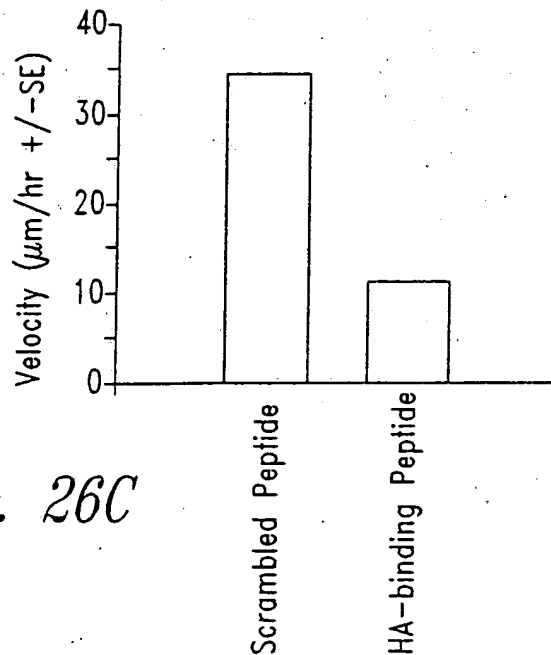


Fig. 26C

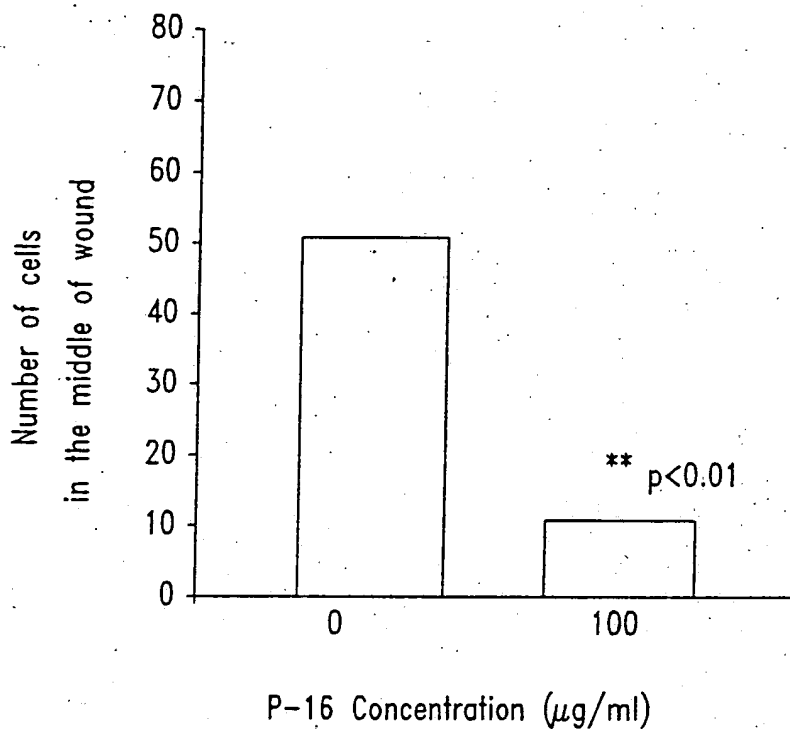


Fig. 27

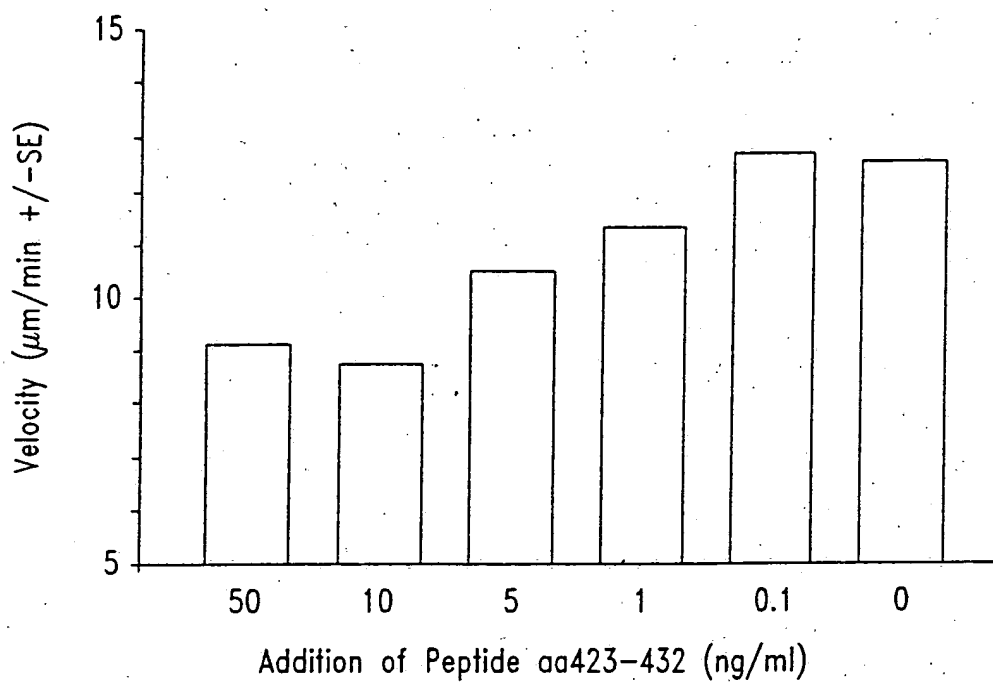


Fig. 28

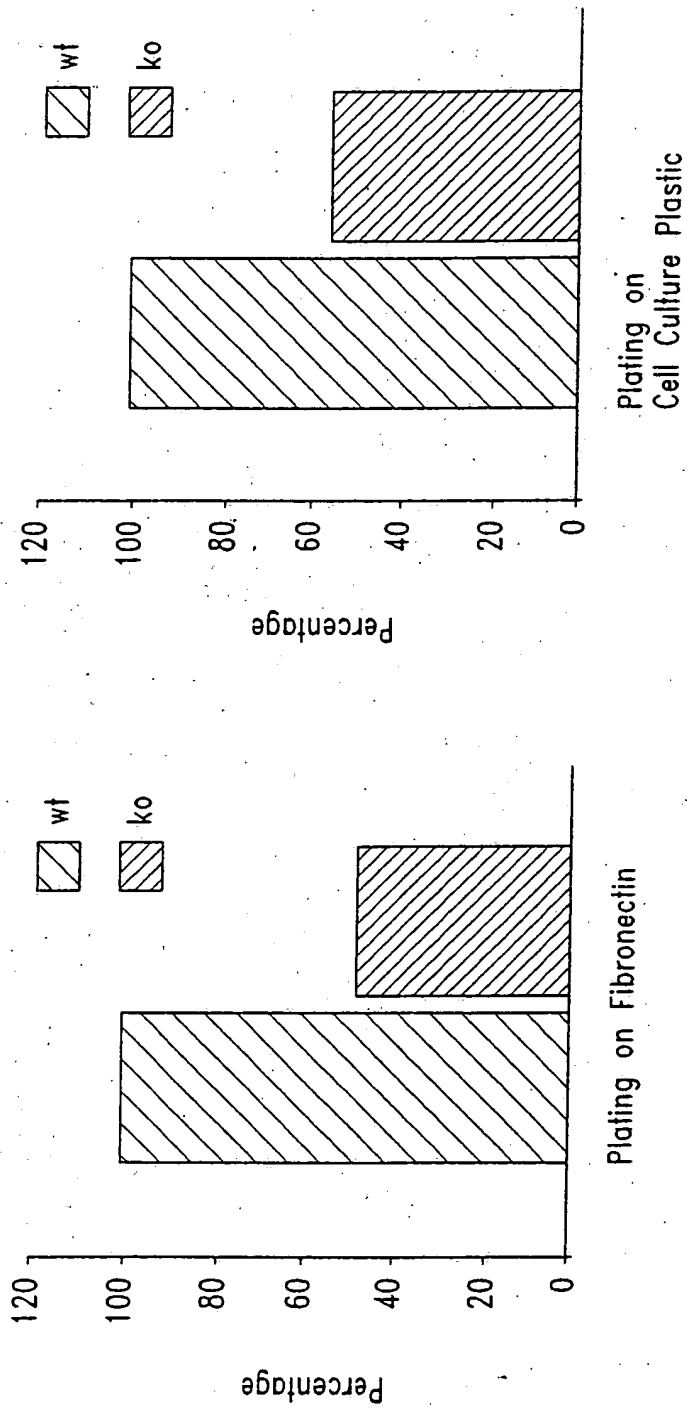


Fig. 29

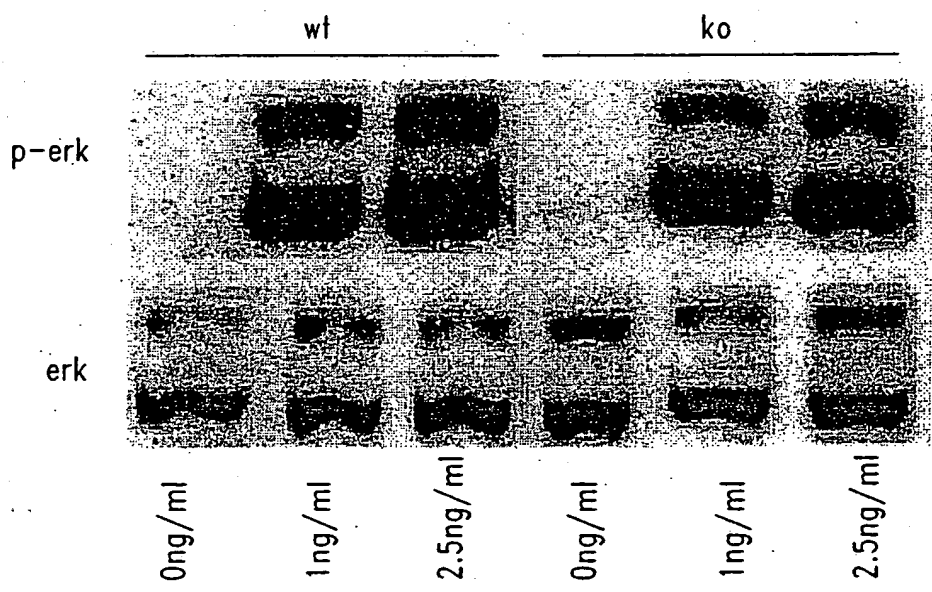
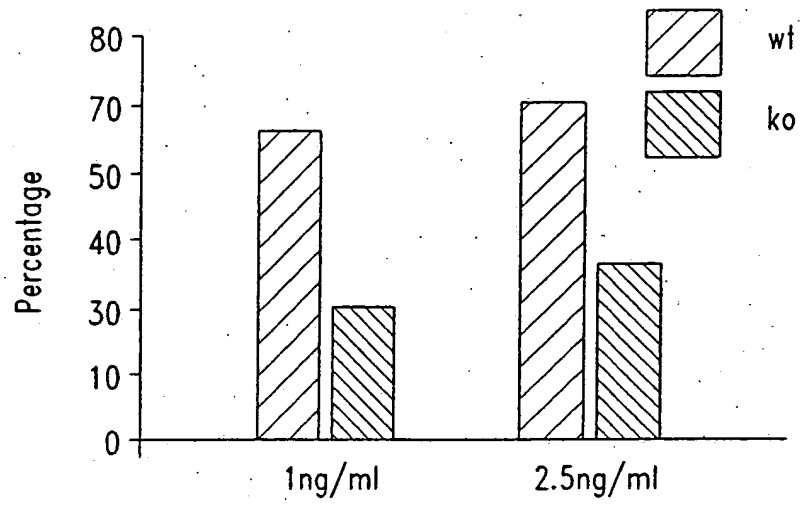


Fig. 30

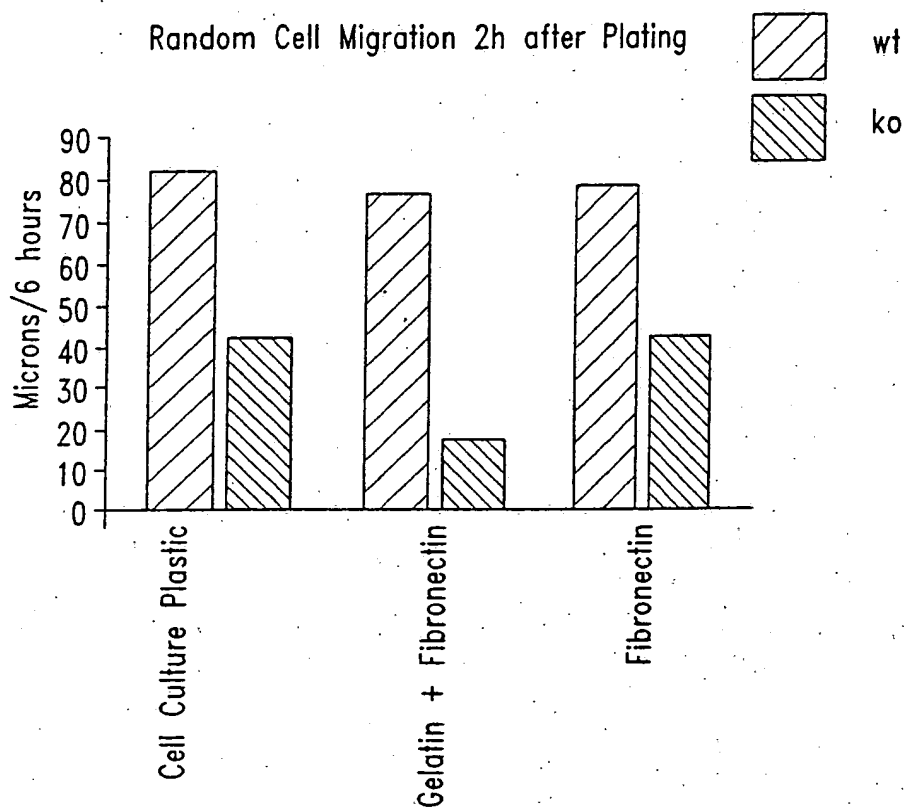


Fig. 31

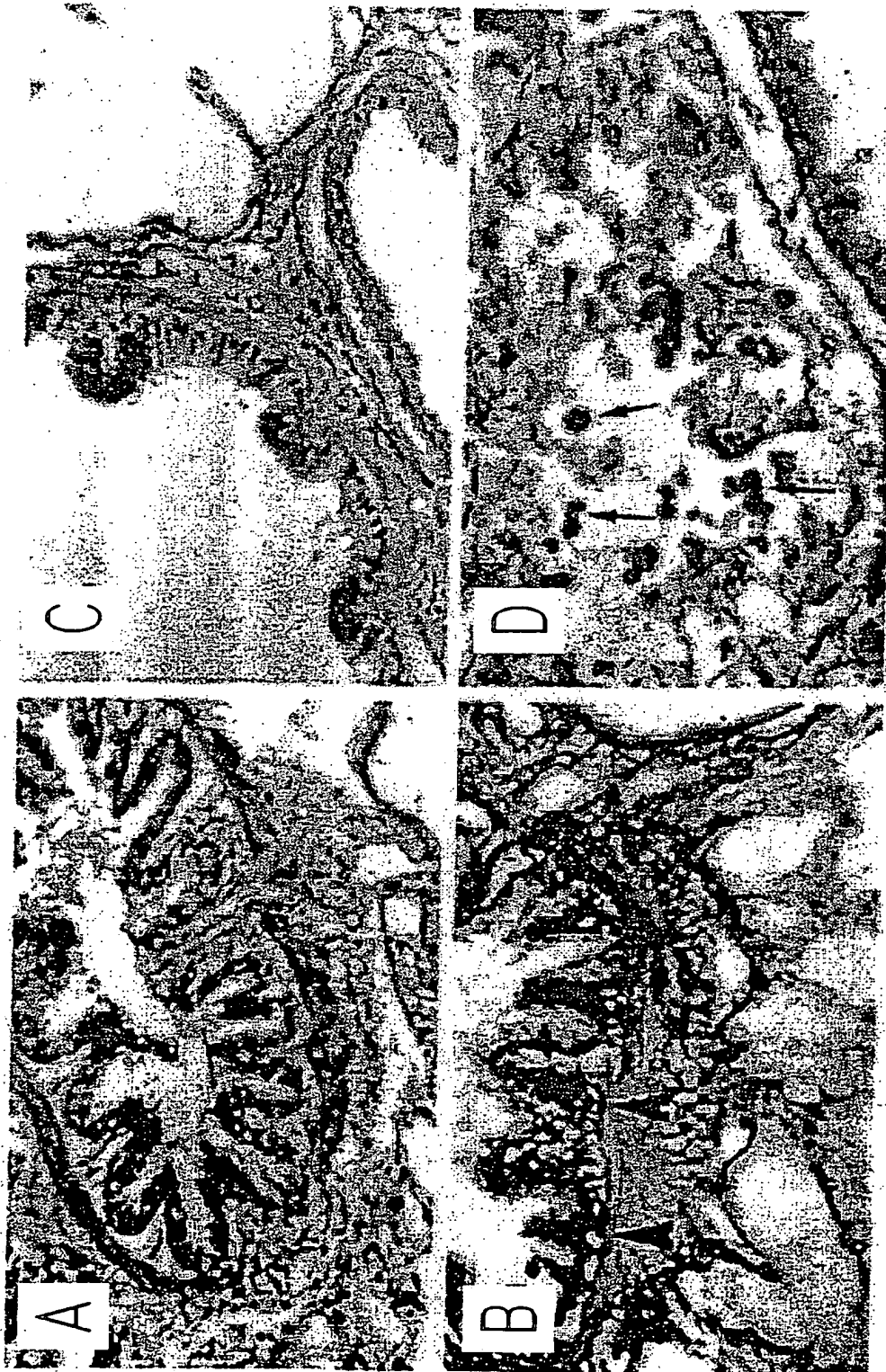


Fig. 32

FOSTOT 60882660

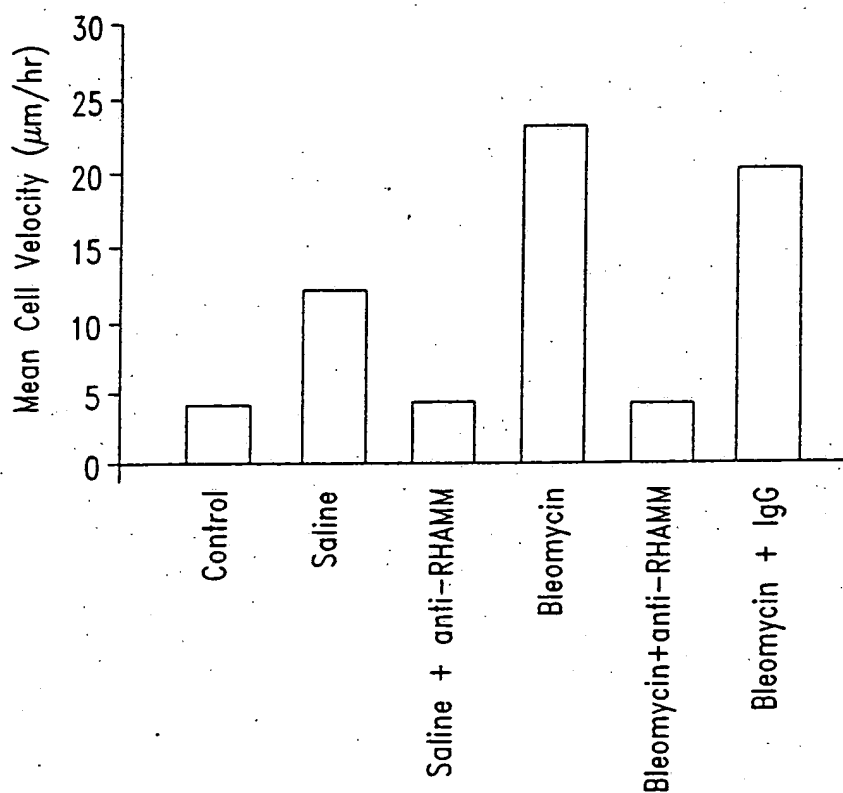


Fig. 33

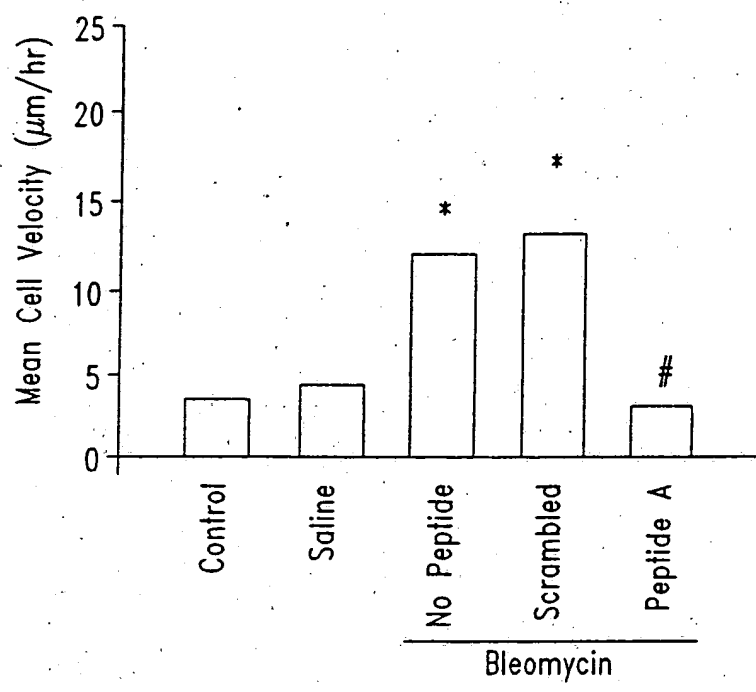


Fig. 34

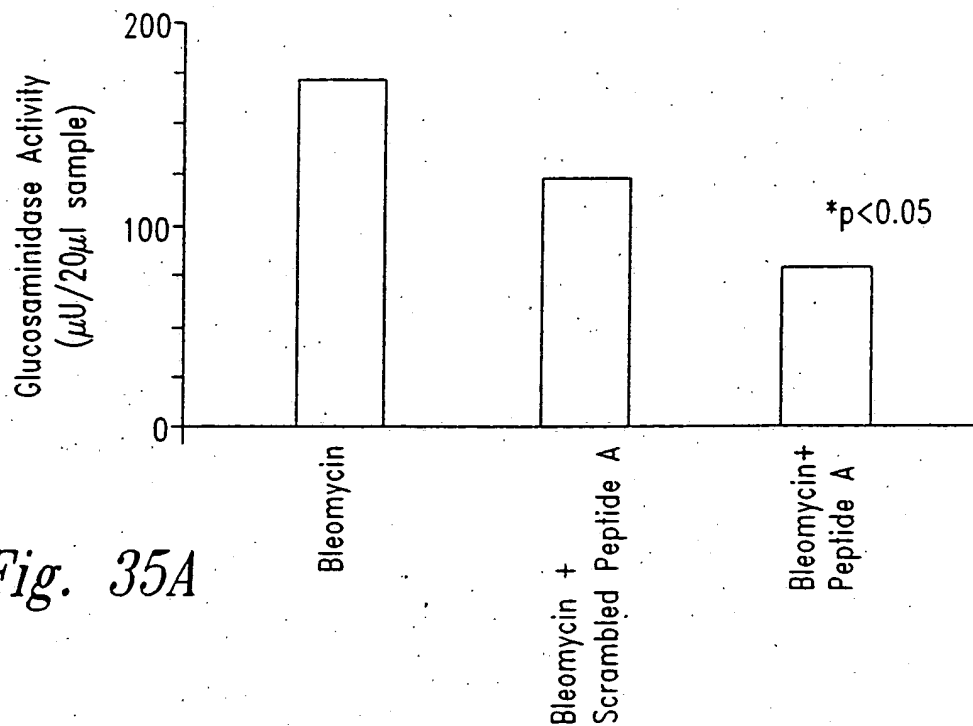


Fig. 35A

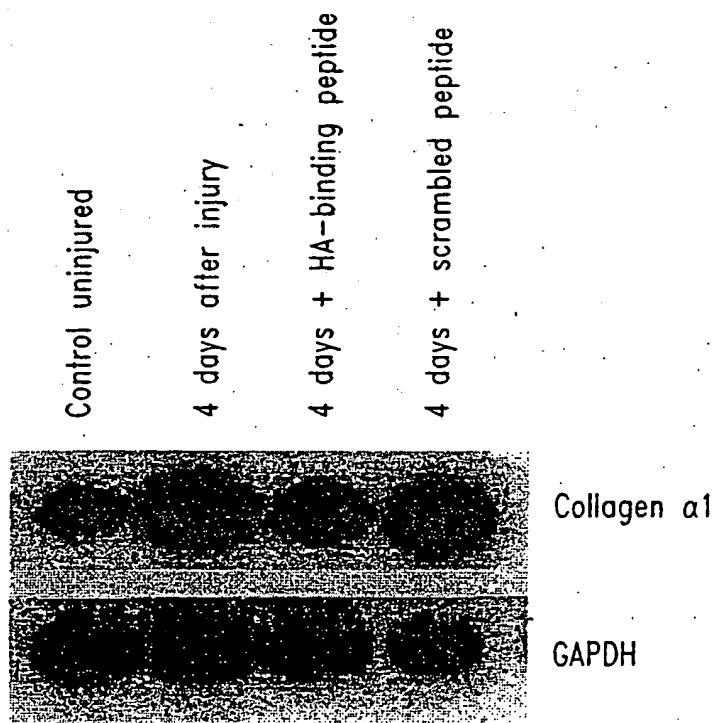


Fig. 35B

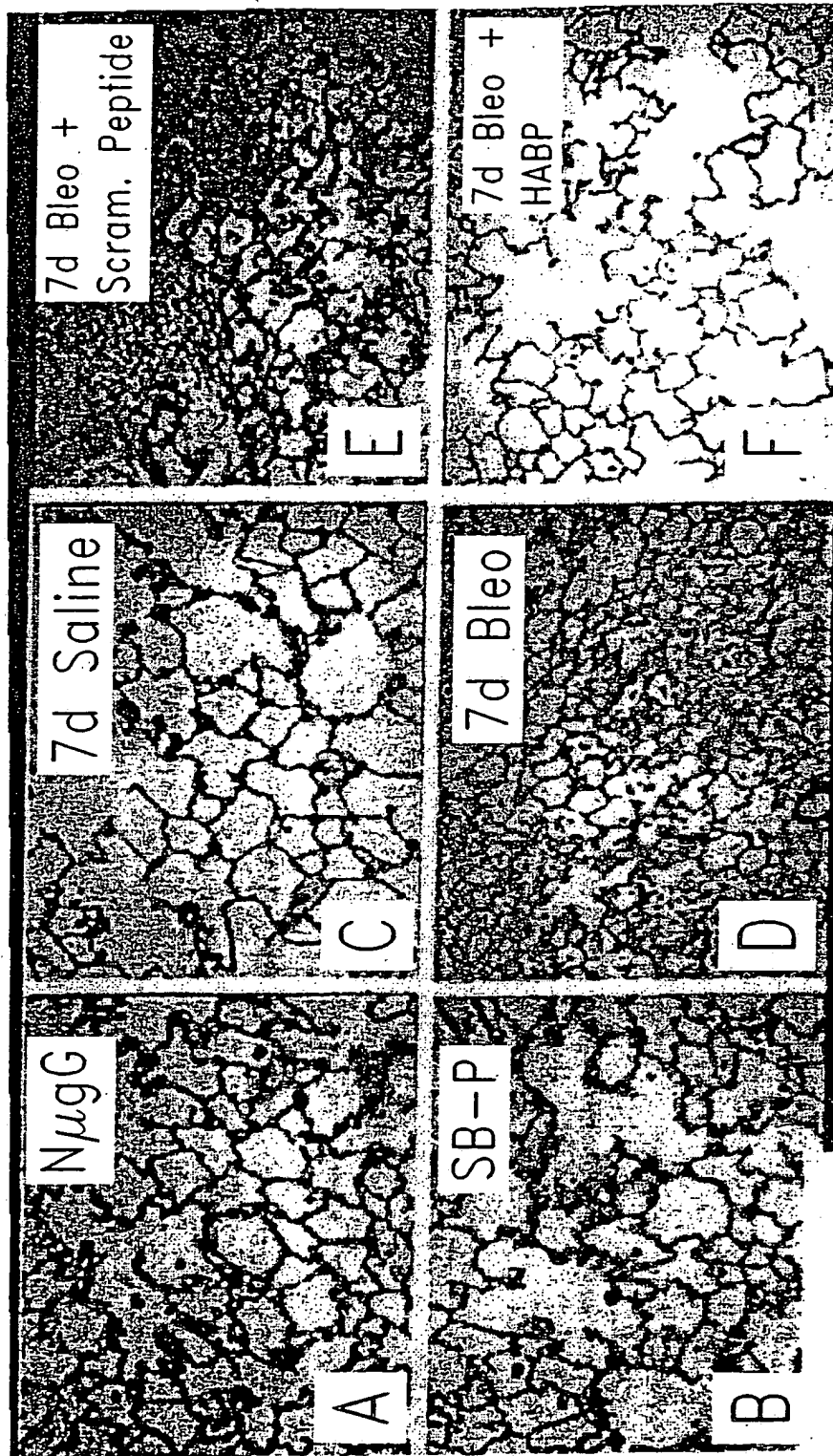


Fig. 36

Patient	% of total X4+ cells	% of total V5+ cells	Neutrophils			Monocytes/macrophages			T cells		
			% of total cells	% of X4+ cells	% of V5+ cells	% of total cells	% of X4+ cells	% of V5+ cells	% of total cells	% of X4+ cells	% of V5+ cells
W.H.	ND	50.7	70.5	81.2	ND	21.8	87.1	66.4	6.7	11.7	13.0
M.T.	74.6	20.7	80.7	ND	9.9	11.2	89.6	ND	9.0	<2.0	ND
L.S.	43.9	34.4	ND	ND	ND	8.5	ND	53.8	20.4	5.3	<2.0
S.M.	67.6	4.0	67.3	80.9	ND	ND	ND	ND	3.0	10.0	<2.0
M.M.	19.2	19.6	25.2	68.3	ND	ND	ND	ND	2.7	4.5	8.0
D.D	35.7	31.2	40.7	99.3	ND	ND	ND	ND	6.9	<2.0	9.9
P.B. (r)	77.4	71.8	ND	ND	ND	9.2	99.8	88.3	4.4	13.0	33.2
P.B. (l)	85.0	82.3	ND	ND	ND	12.8	99.4	58.3	3.4	11.0	30.2
S.L.	51.6	45.5	61.7	92.1	77.2	8.8	73.4	85.6	24.0	6.0	9.0
R.C.	10.6	6.7	54.1	63.8	13.8	5.6	50.3	43.9	6.3	8.5	11.9
N.N.	27.9	10.3	44.1	54.6	21.4	3.5	77.1	49.4	6.8	33.1	22.2
M.G	85.48	84.63	86.7	99.6	99.5	5.52	98.7	98.9	6.36	4.8	7.6

• ND - non-determined

- (r) - right knee

- (1) - left knee

Fig. 37

APPLN. FILING DATE: FILED HEREWITH

TITLE: COMPOSITIONS AND METHODS FOR TREATING CELLULAR RESPONSE TO INJURY AND ...

INVENTOR(S): TONY CRUZ, ET AL.

ATTORNEY DOCKET NO.: 033352-010

SHEET 38 of 63

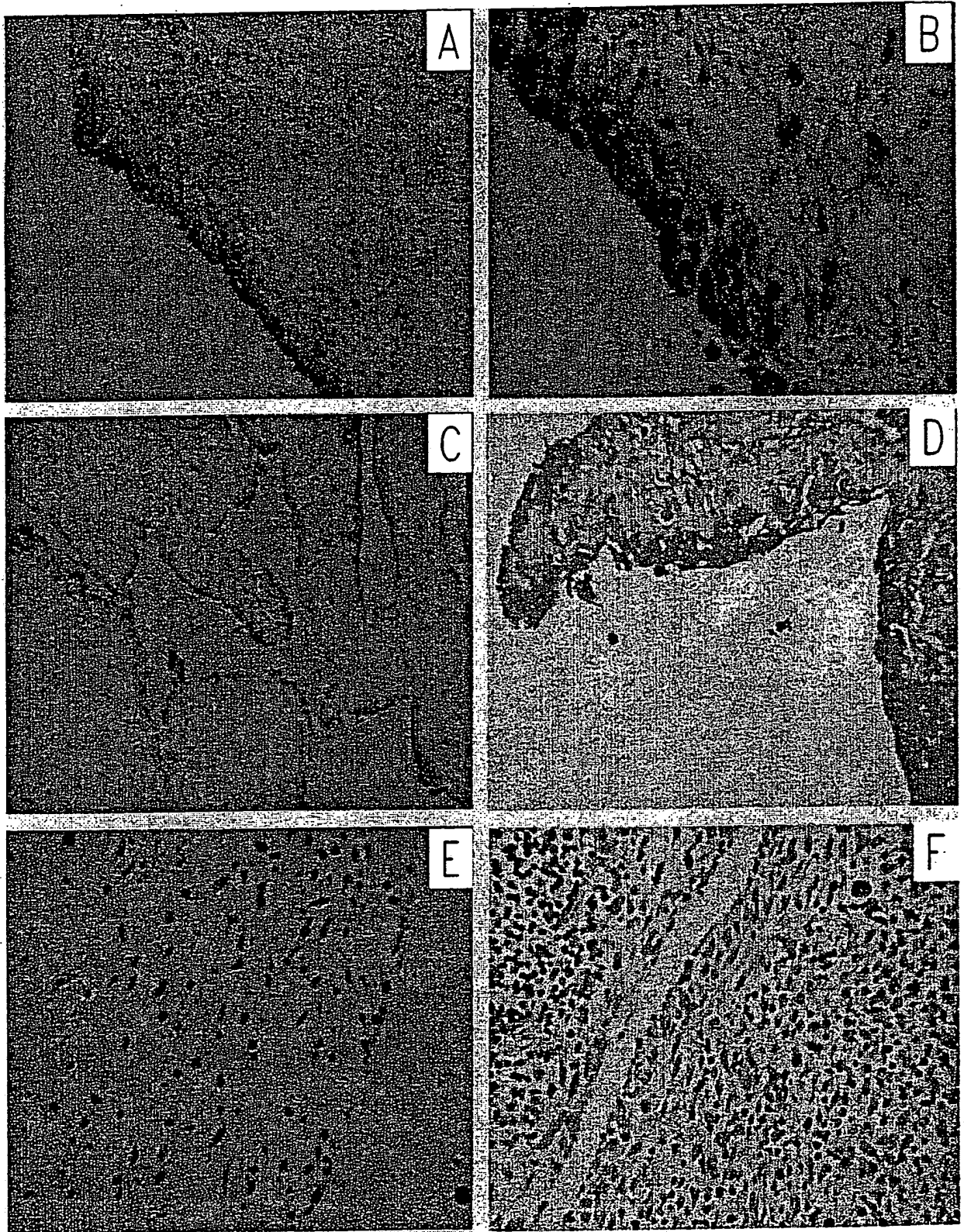


Fig. 38

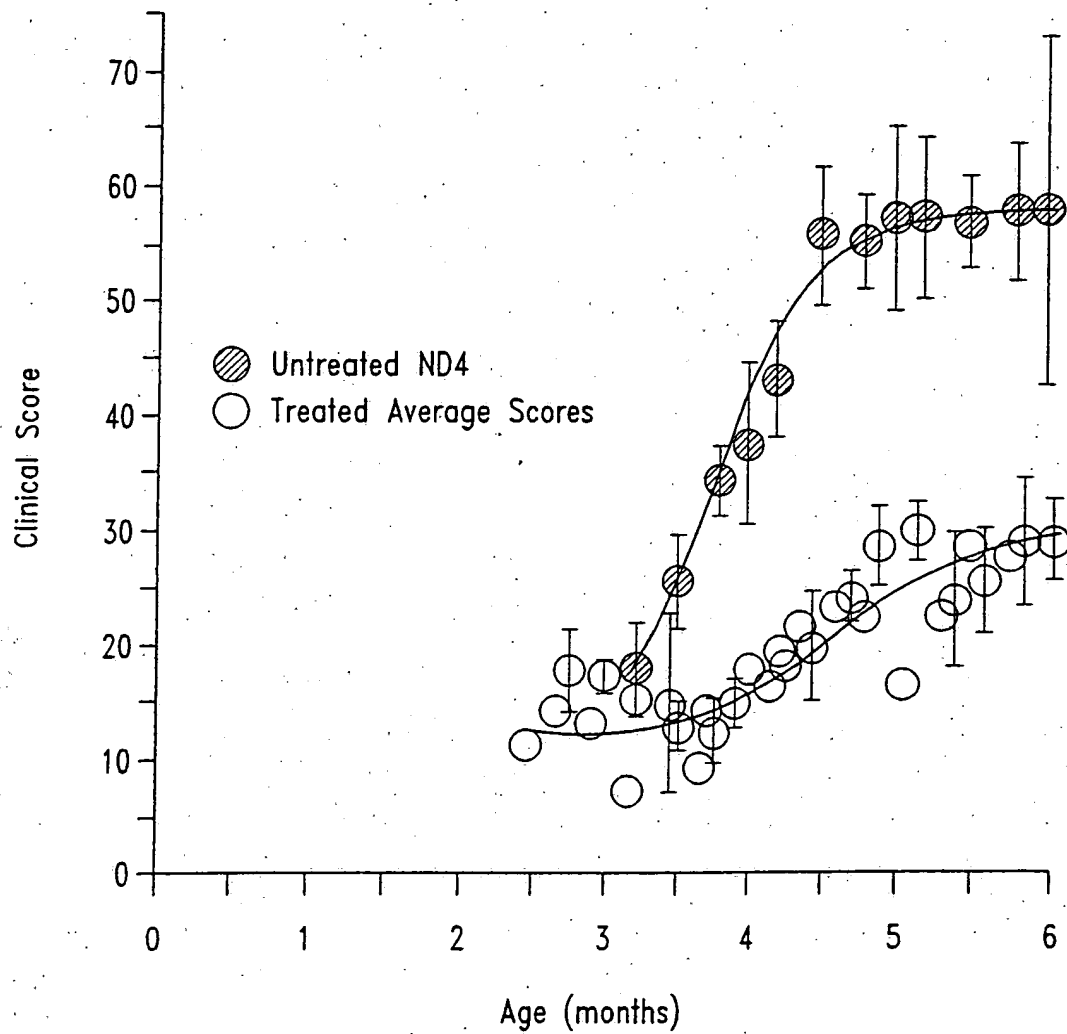


Fig. 39

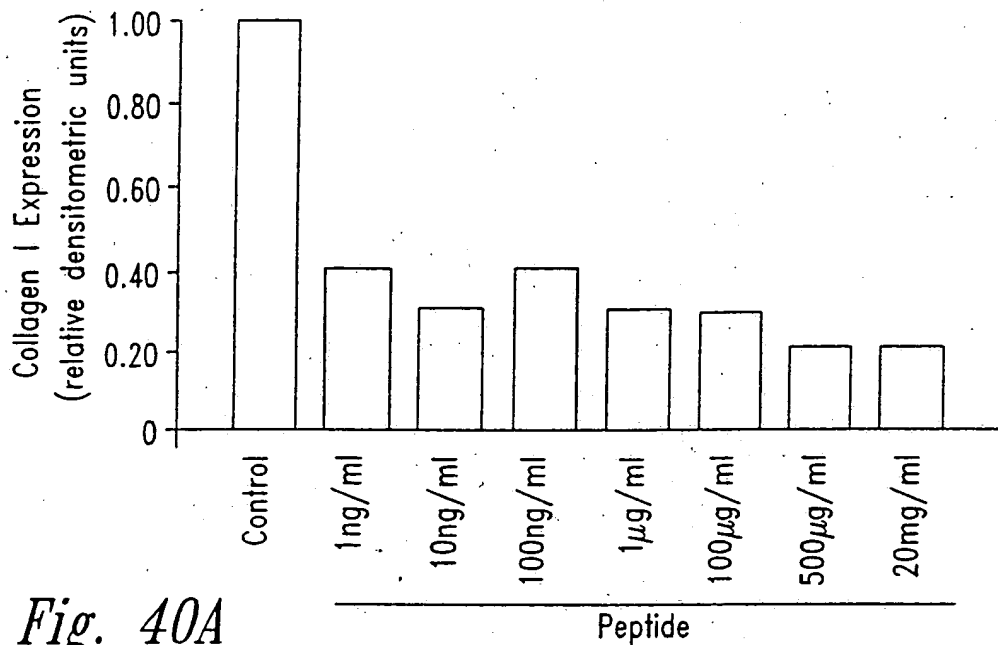


Fig. 40A

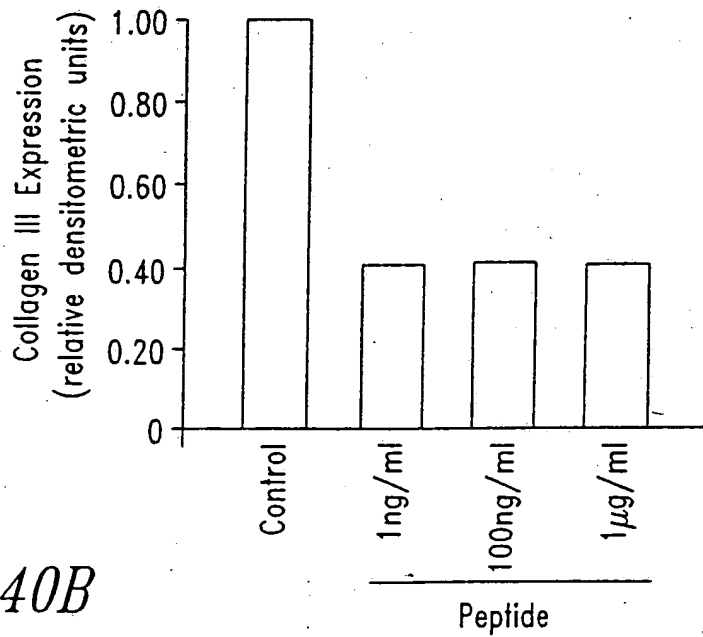


Fig. 40B

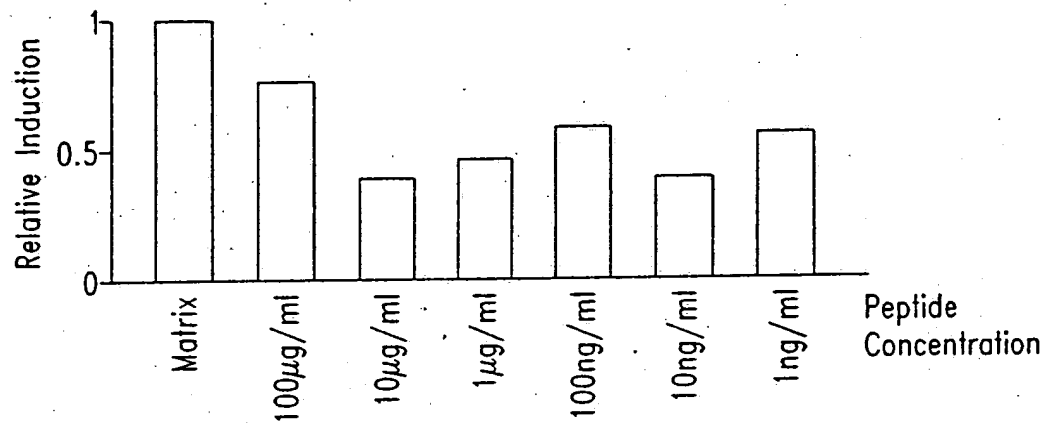


Fig. 41

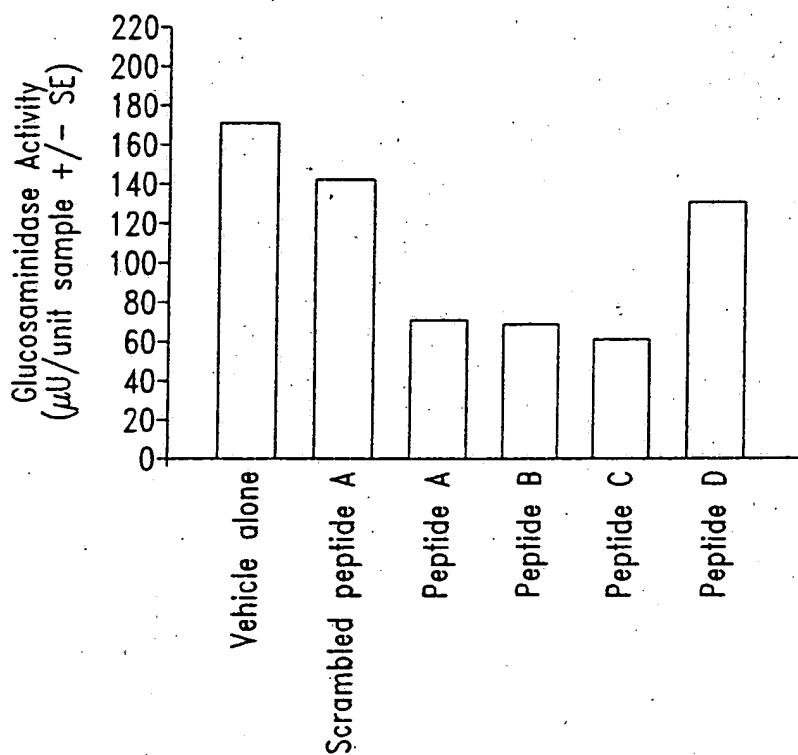


Fig. 42

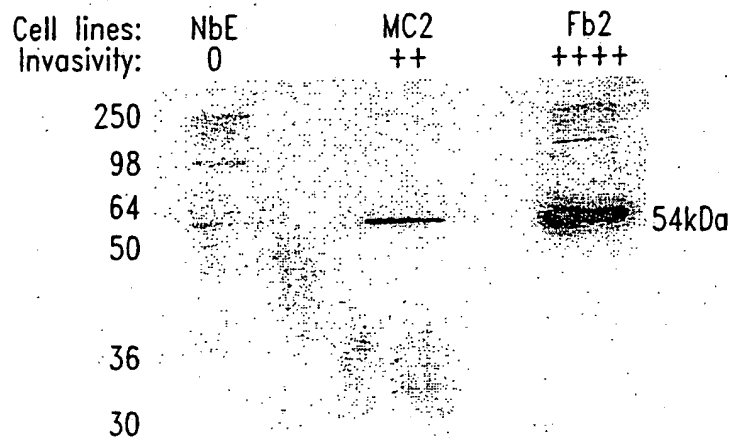


Fig. 43A

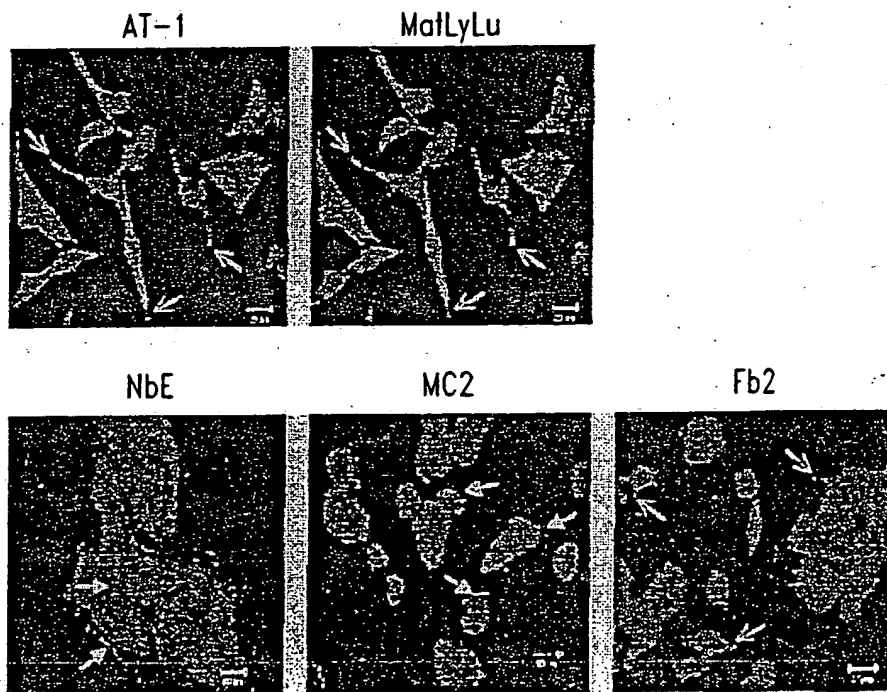


Fig. 43B

033352-010

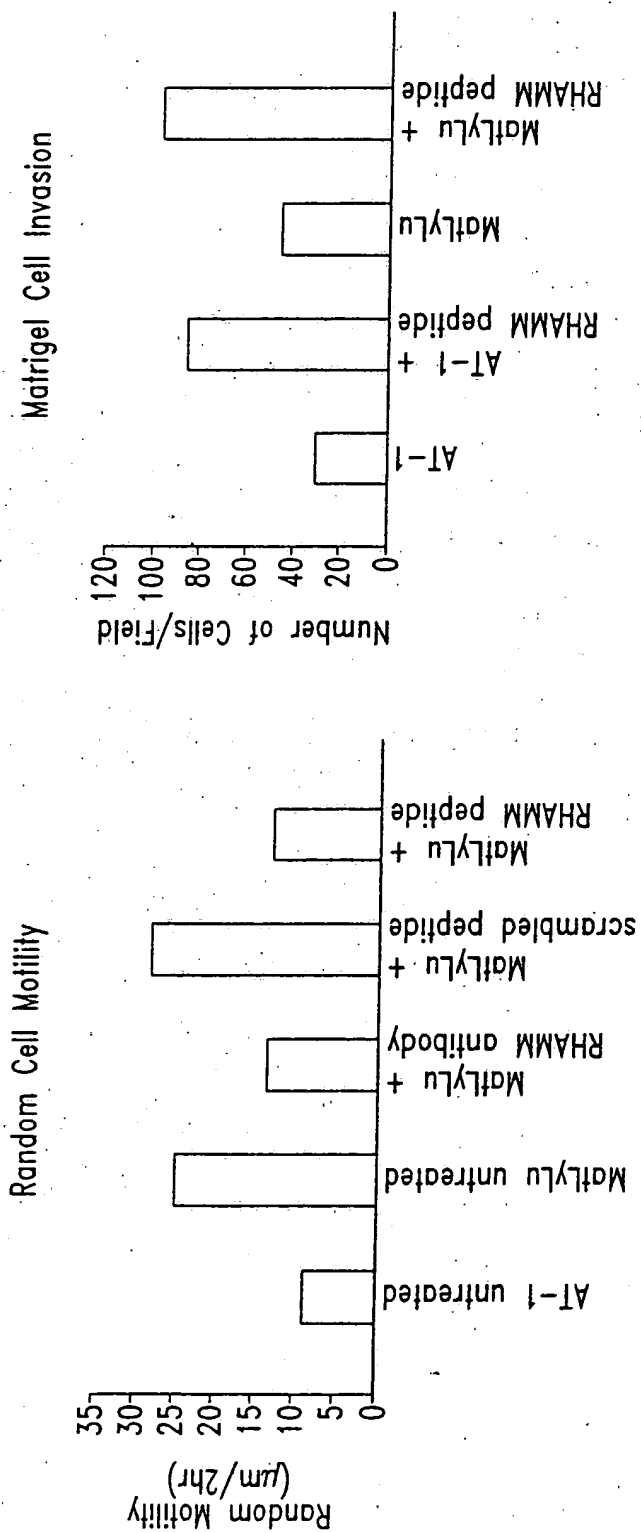


Fig. 44A

FIG. 44A

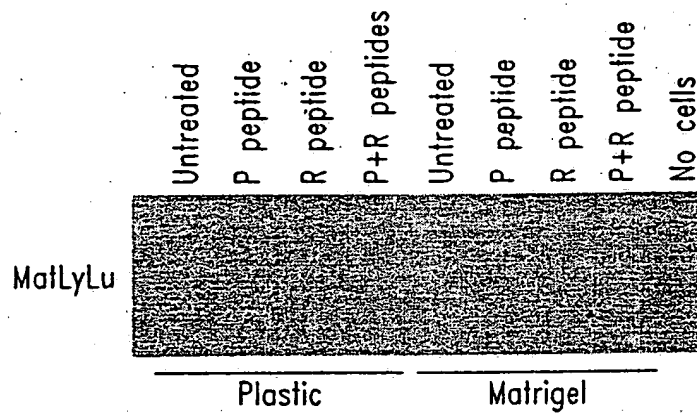
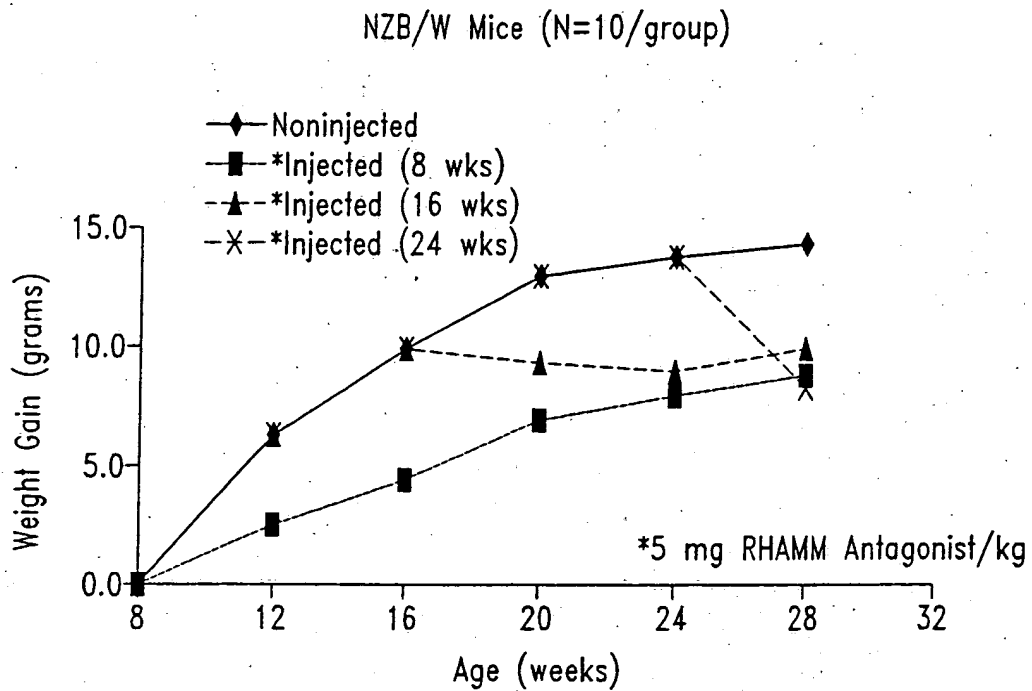


Fig. 44B



Note: This effect is not being seen with NOD mice

Fig. 45

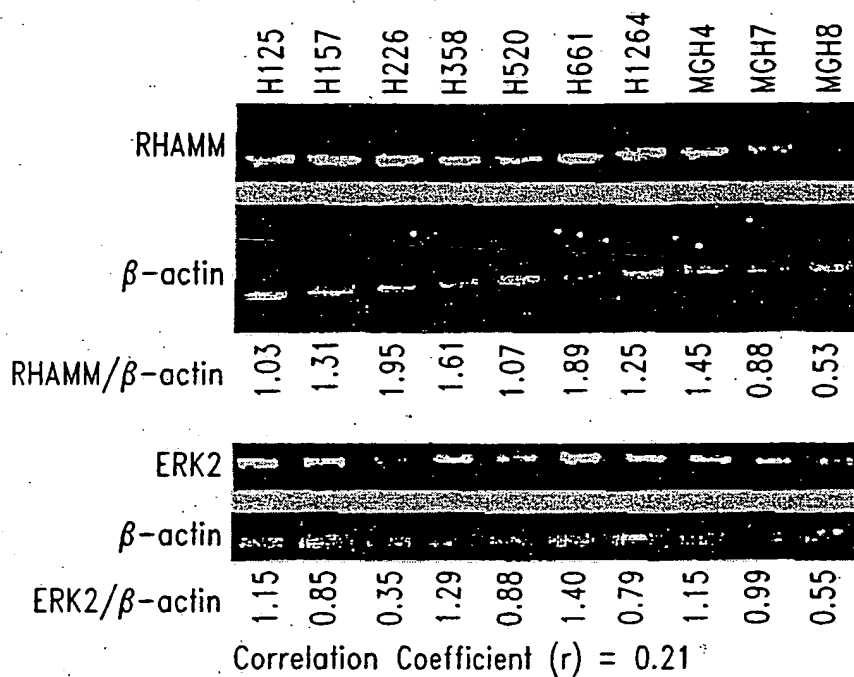


Fig. 46A

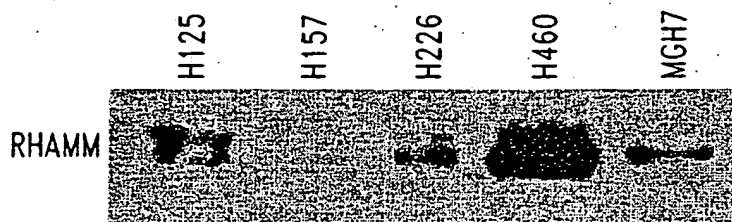


Fig. 46B

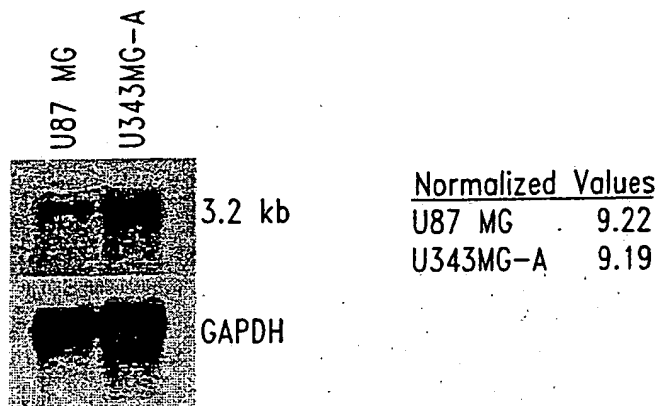


Fig. 47A

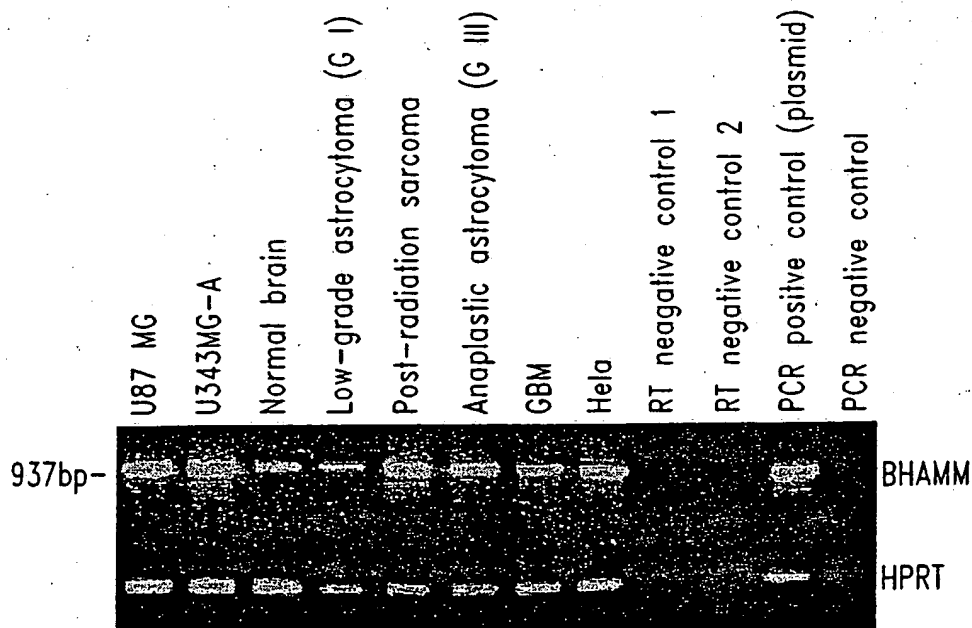


Fig. 47B

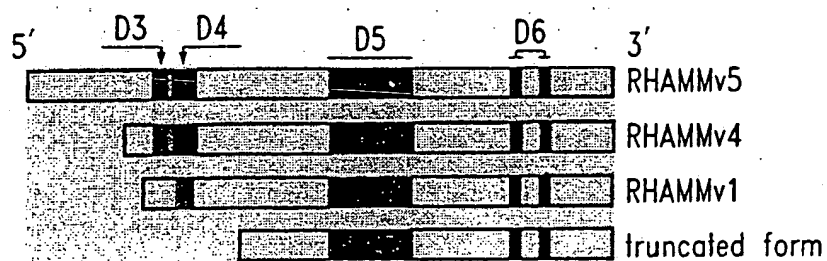


Fig. 48A

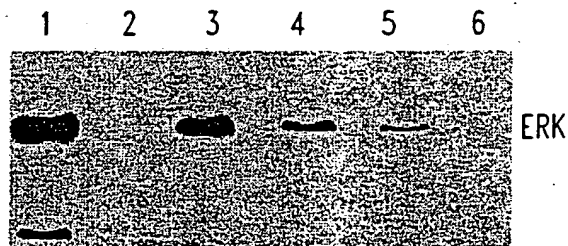


Fig. 48B

RHAMM binding protein cDNA (RABP) (partial)

GAA TTC GCG GCG GCG TCG ACC AAC AAG CCC CCT GCT GTT TCC CCG GGG
 E F A A A S T N K P P A V S P G
 GTG GTC TCC CCA ACC TTT GAA CTT ACA AAT CTT CTA AAT CAT CCT GAC
 V V S P T F E L T N L L N H P D
 CAT TAT GTA GAA ACA GAG AAC ATT CAG CAT CTC ACA GAC CCG GCT CTA
 H Y V E I E N I Q H L T D P A L
 GCA CAT GTG GAT AGA ATA AGC GAA GCC CGG AAA CTG AGT ATG GGA TCT
 A H V D R I S Q A R K L S M G S
 GAT GAT GCT GCC TAC ACA CAA GCT CTG CTG GTG CAC CAG AAG GCC AGG
 D D A A Y T Q A L L V H Q K A R
 ATG GAA CGG CTT CAA AGA GAG CTC GAG ATG CAA AAG AAA AAG CTG GAT
 M E R L Q R E L E M Q K K K L D
 AAA CTC AAA TCT GAG GTC AAT GAG ATG GAA AAT AAT CTA ACT CGA AGG
 K L K S E V N E M E N N L T R R
 CGC CTG AAG AGA TCA AAT TCC ATT TCC CAG ATA CCG TCA CTC GAA GAA
 R L K R S N S I S Q I P S L E E
 ATG CAG CAG TTG AGA AGT TGT AAT AGA CAA CTC CAG ATT GAC ATT GAC
 M Q Q L R S C N R Q L Q I D I D
 TTT GAC TGC TTA ACC AAA GAA ATT GCA TCT TTT TCA AGC CCG AGG ACC
 F D C L T K E I A S F S S P R T
 ACA TTT TAA CCC CAG CGC TAT TCA TAA CTT TTA TGA CAA TAT TGG ATT
 T F *
 TGT AGG CCC TGT GCC ACC AAA ACC CAA AGA TCA AAG GTC CAC CAT CAA
 AGG TCG ACG CGG

Fig. 49A-

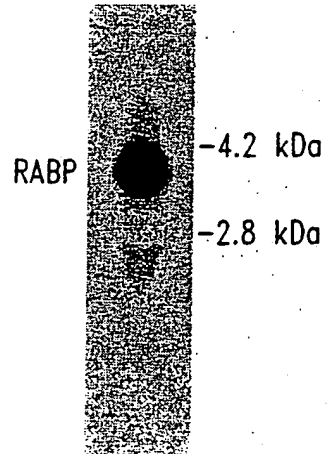


Fig. 49B

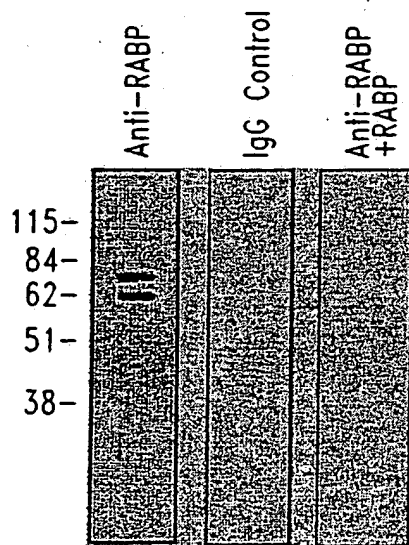


Fig. 49C

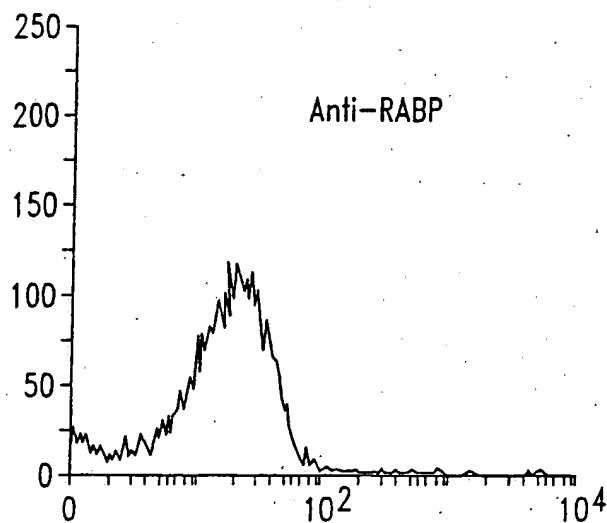
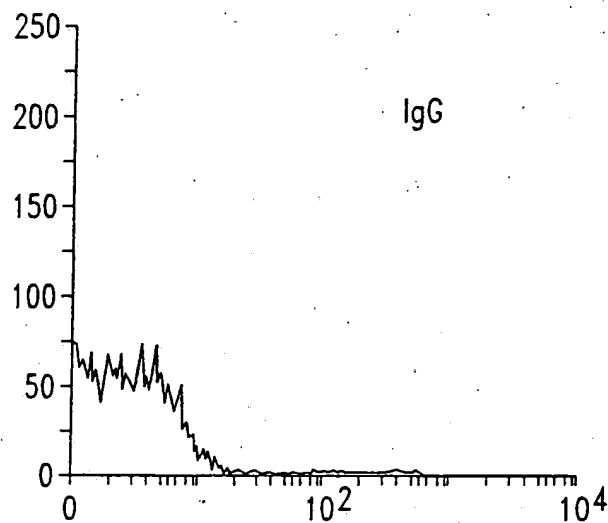


Fig. 49D

Human: 76 KESQKNDKDKILEKEIRVLLQERGAQDRRIQDLETELEKMEARLNAALREKTSLSANNATLEKQI IELTRTNEL

Mouse: 1 MRALSLELMKLRNKRRETKMRSMMVKQEGMELKLQATOKDLTESKGGIKIVQLEGKLVSIKEKEI

Mouse: 63 DEKCETEKLLLEYIQEISCASDOVECKVDIAQLEEDLKEKDREILSLKQSL EENITF-SKQIEDLTVKCOLLETE

Mouse: 138 RNDLVSKDRERAETLSAEMQILTERLALERQEYKLOQKELQSQSLLOQEKEL SARLQQQLCSFQEEMTSEKNVF

Mouse: 213 KEELKLALAE L DAVQQKEEQSERLVKQLEERKSTAEQLTRLDNLLREKEVELEKHIAAHQAAILIAQEKYNDTA

Human:

Mouse: 288 QSLRDVTAQLESVQEKYNDTAQSLRDVTAQLESEQEKYNDTAQSLRDVTAQLESEQEKYNDTAQSLRDVTAQLES

Mouse: 363 QEKYNDTAQSLRDVTAQLESYKSSTLKEIEDLKENLTQEKVAMAEKSVEDVQQILTAESTNQEYARMQDLO

Mouse: 438 NRSTLKEEEIKEITSSFLEKITDLKNQLROODEDFRKOLEEKGRKRTAEKENVMTELTMEINKWRLLYEELYEYTK

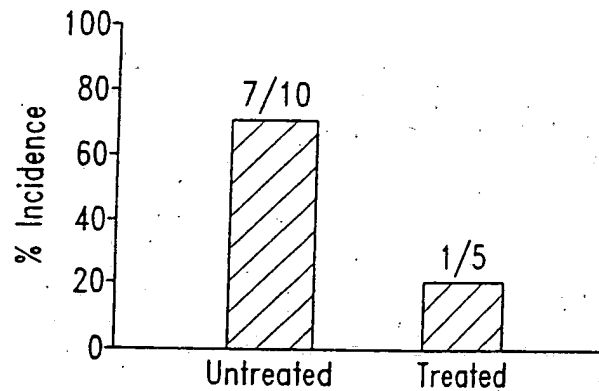
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|||||
Mouse: 513 PFQ00LDAFEAEKOALLNEHGATQEQLNKIRDSYAOLLGHONLKQKIKHVVKLKDENSOLKSEVSKLRSOLVKRK

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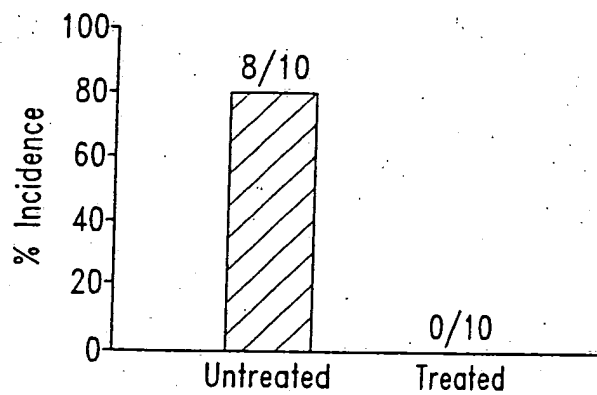
house: 588 ONELRLOGELDKALGIRHFDPSKAFCHASKENF---TPLKEGNPNCC*

Fig. 50



Note: normal blood glucose level = 99-140
Incidence of abnormal blood glucose level in NOD mice

Fig. 51



Incidence of abnormal urine glucose level in NOD mice

Fig. 52

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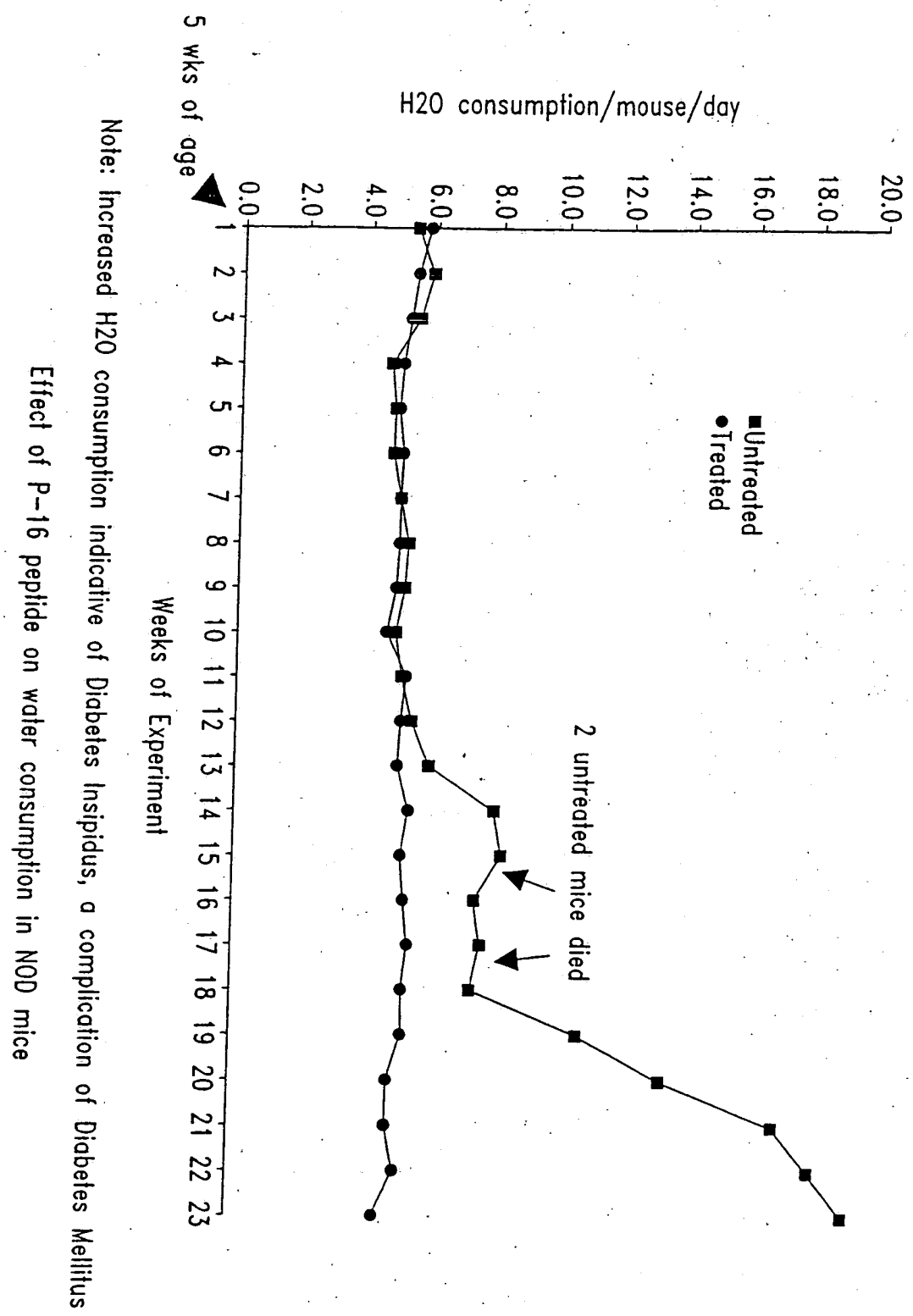
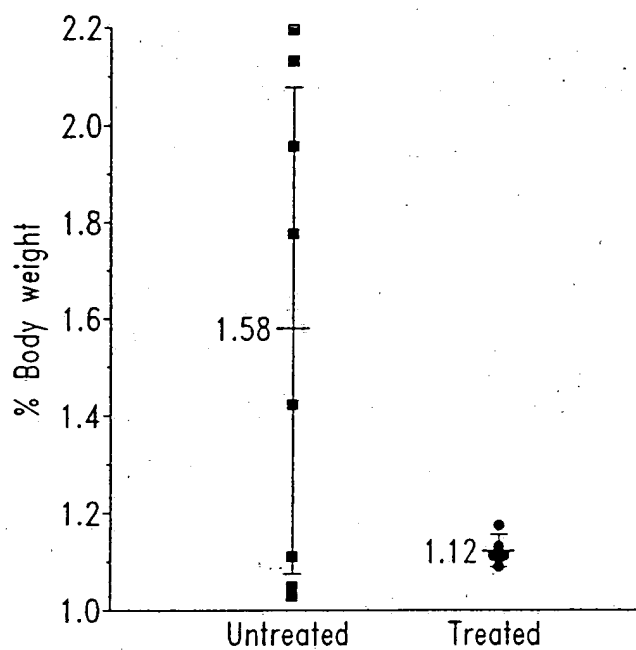


Fig. 53



Note: 2 untreated animals died during the course of experiment
Effect of P- 16 peptide on kidney weight in NOD mice

Fig. 54

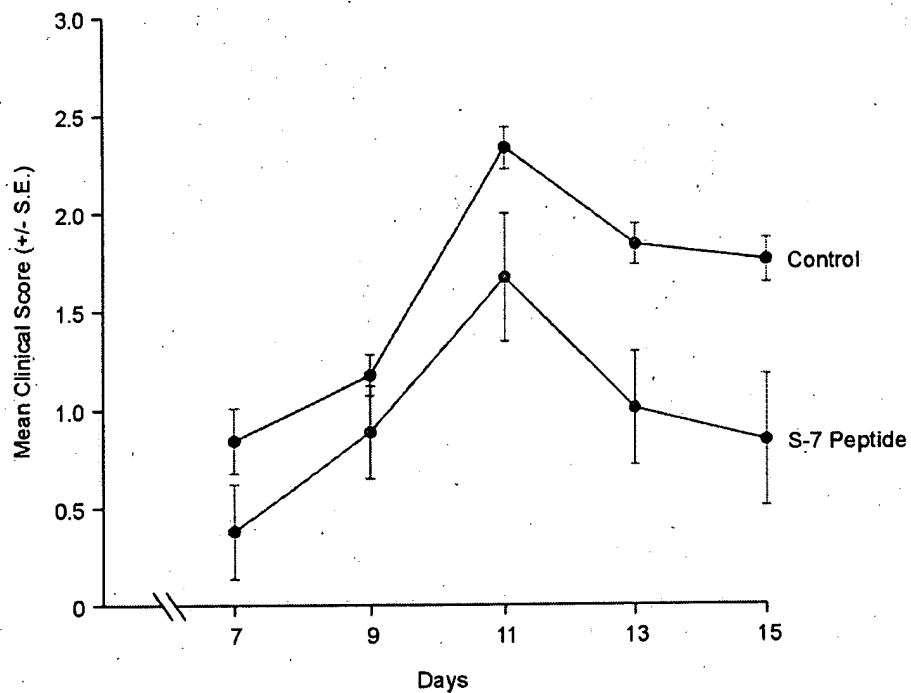


Fig. 55

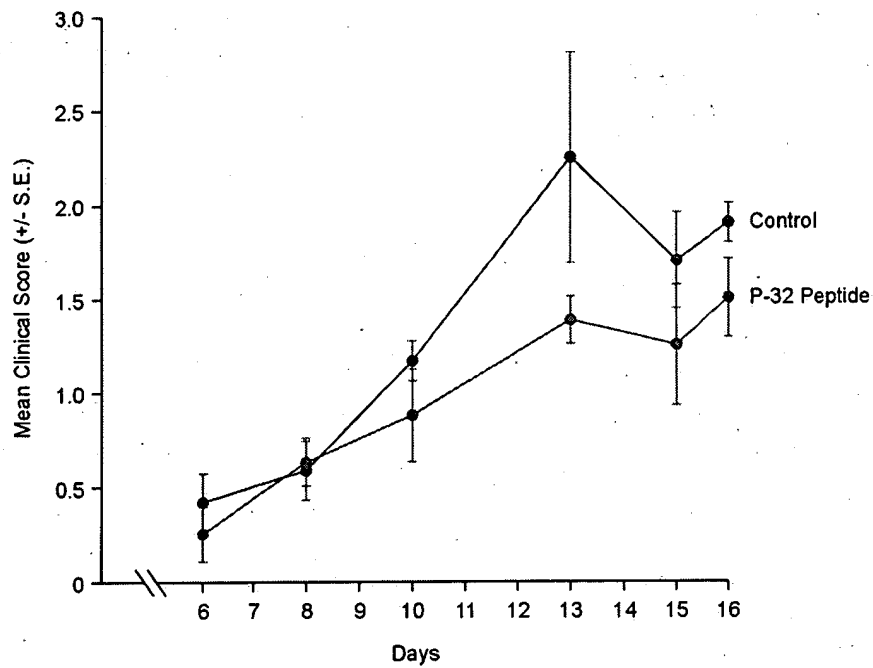


Fig. 56

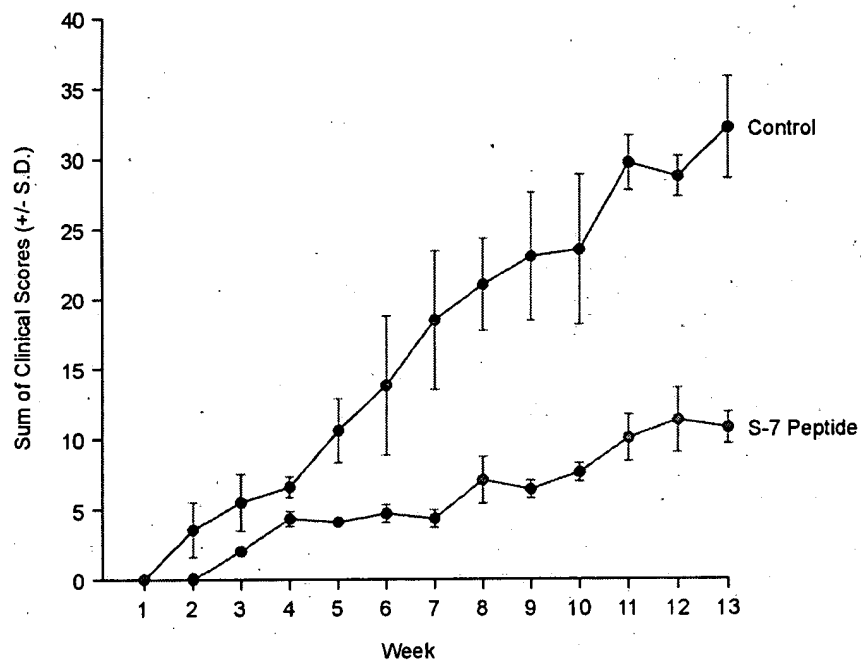


Fig. 57

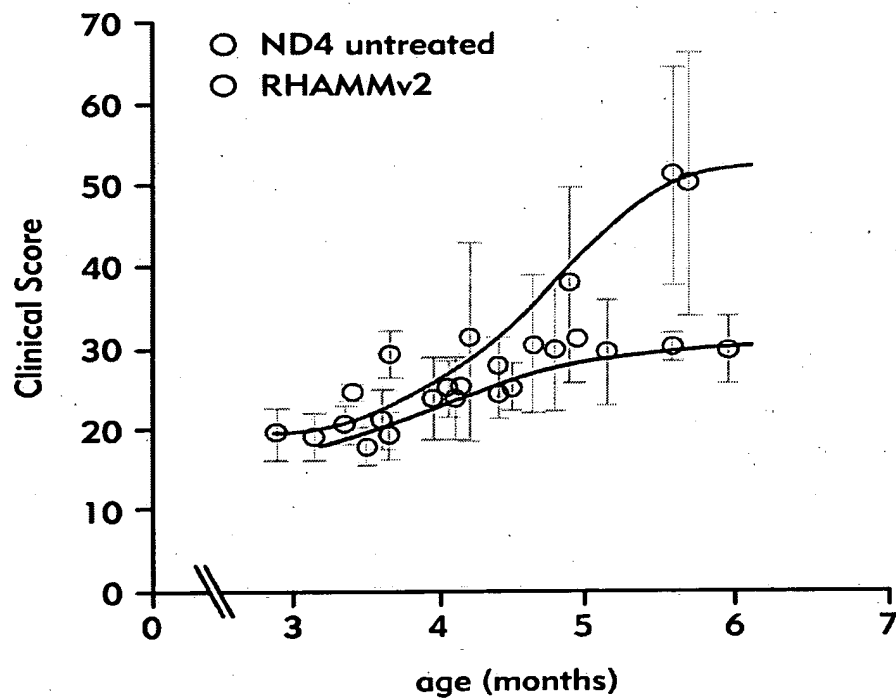


Fig. 58

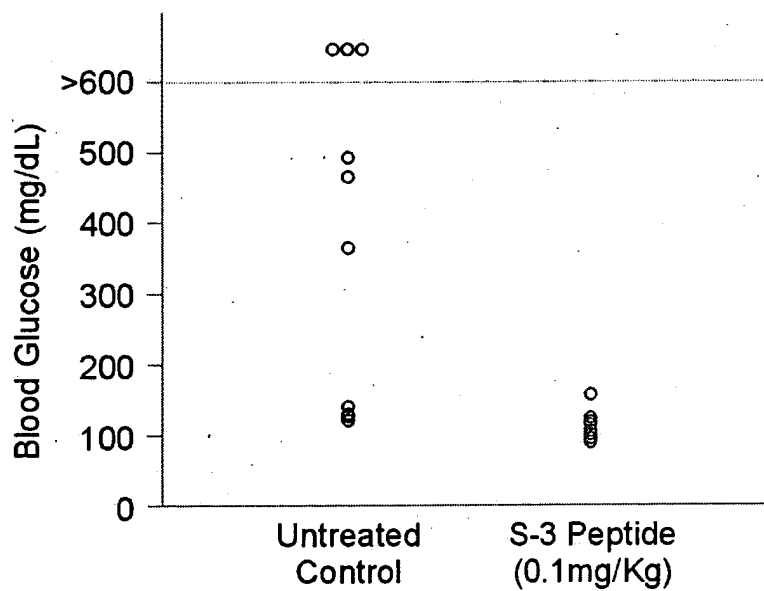


Fig. 59.

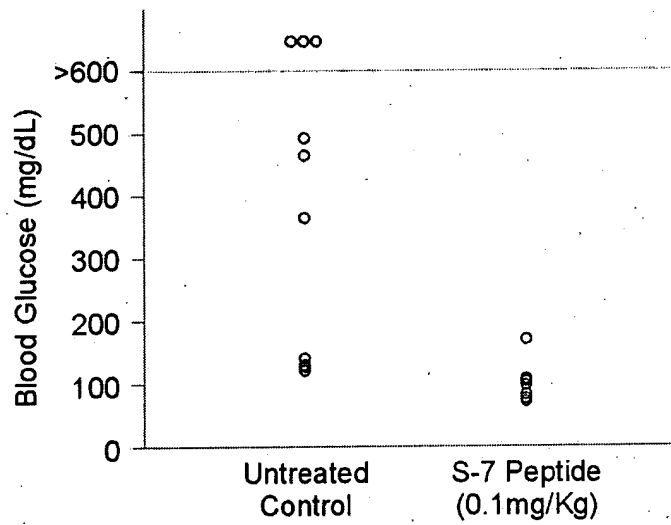


Fig. 60